

ภาคผนวก ข.2

เอกสารประกอบผลการปฏิบัติตาม
มาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อม
(ระยะดำเนินการ)

ภาคผนวก ข.2-1

ใบรับรองโครงการอุตสาหกรรมสีเขียว ระดับที่ 4
ระบบสีเขียว (Green System)

การรับรองเลขที่ : GI(E) 4-009/2568



ใบรับรองฉบับนี้ให้ไว้กับ

บริษัท โพลโค คัทเตด สตีล (ประเทศไทย) จำกัด

ที่ตั้งสถานประกอบการ : เลขที่ 7/448 หมู่ที่ 6 ตำบลมาบยางพร
อำเภอปลวกแดง จังหวัดระยอง 21140

เพื่อรับรองว่าเป็น
อุตสาหกรรมสีเขียวระดับที่ 4
วัฒนธรรมสีเขียว (Green Culture)

ทุกคนในองค์กรให้ความร่วมมือร่วมใจดำเนินงานอย่างเป็นมิตรกับสิ่งแวดล้อมในทุกด้าน
ของการประกอบกิจการ จนกลายเป็นส่วนหนึ่งของวัฒนธรรมองค์กร

ลงชื่อ

ปลัดกระทรวงอุตสาหกรรม

ออกให้ ณ วันที่ : 18 ธันวาคม 2567
มีผลถึง วันที่ : 17 ธันวาคม 2570
เลขประจำตัวผู้เสียภาษี : 0105556189144
เลขทะเบียนโรงงาน : 82250900125578



ภาคผนวก ข.2-2

นโยบายความปลอดภัยและสิ่งแวดล้อม

ประกาศบริษัทฯ

เลขที่ SE001/2025

เรื่อง นโยบายด้านอาชีวอนามัย ความปลอดภัยและสิ่งแวดล้อม

เนื่องจาก POSCO-TCS ดำเนินการตามนโยบายการเป็นพลเมืองขององค์กร (Corporate Citizenship) ที่เป็นการพัฒนาร่วมกัน ดังนั้น เราพยายามที่จะป้องกันอุบัติเหตุและปรับปรุงสุขภาพ รวมถึงคุณภาพชีวิต ด้วยการสร้างสภาพแวดล้อมการทำงานที่ปลอดภัย และน่ารื่นรมย์ ให้กับพนักงานทุกคน และแสดงถึงความรับผิดชอบต่อสังคมด้วยการตอบสนองต่อความต้องการคาดหวังของผู้มีส่วนได้ส่วนเสียทุกภาคส่วน ด้วยเหตุนี้ บริษัทฯ จึงได้กำหนด นโยบายด้านการจัดการอาชีวอนามัย ความปลอดภัยและสิ่งแวดล้อม ตามเกณฑ์พื้นฐานต่อไปนี้

1. ยึดถือและปฏิบัติให้สอดคล้องตามเกณฑ์มาตรฐาน กฎหมายด้านอาชีวอนามัย ความปลอดภัยและสิ่งแวดล้อม รวมถึงการปฏิบัติตามกฎหมายท้องถิ่น สนธิสัญญา และข้อตกลงอื่นๆ ที่เกี่ยวข้อง
2. พัฒนาระบบการจัดการด้านอาชีวอนามัย ความปลอดภัย และสิ่งแวดล้อมอย่างต่อเนื่อง โดยเน้นการสร้างระบบนิเวศอุตสาหกรรมอันแข็งแกร่งไปด้วยกันกับพันธมิตรทางธุรกิจ
3. ค้นหา และกำจัดอันตราย ลดและป้องกันความเสี่ยงที่จะก่อให้เกิดการบาดเจ็บและการเจ็บป่วยจากการทำงาน และสร้างสถานที่ทำงานแห่งความสุขและปลอดภัย เพื่อส่งเสริมสวัสดิภาพและพลานามัยของสมาชิกองค์กร โดยกำหนดเป้าหมายในการลดการเกิดอุบัติเหตุอย่างต่อเนื่อง
4. ปกป้องสิ่งแวดล้อม และป้องกันมลภาวะจากกิจกรรม ผลิตภัณฑ์ และบริการ โดยกำหนดเป้าหมายในการอนุรักษ์ทรัพยากร การลดปริมาณขยะและการนำกลับมาใช้ใหม่ การควบคุมการใช้สารเคมีโดยใช้สารทดแทนหรือสารที่เป็นอันตรายน้อยกว่าอย่างเหมาะสม การส่งเสริมการผลิตสินค้าที่เป็นมิตรต่อสิ่งแวดล้อม สนับสนุนการลดการปล่อยก๊าซคาร์บอนเพื่อที่จะบรรลุเป้าหมายคาร์บอนสุทธิเป็นศูนย์
5. มุ่งเน้นให้พนักงานทุกระดับมีส่วนร่วมในการพัฒนาระบบการจัดการด้านอาชีวอนามัย ความปลอดภัย และให้คำปรึกษากับพนักงานเพื่อให้มีความรู้ความสามารถในการปฏิบัติงานอย่างปลอดภัย
6. สื่อสารข้อมูลด้านการจัดการสิ่งแวดล้อมให้กับผู้มีส่วนได้ส่วนเสีย เอาใจใส่กับปัญหาด้านสิ่งแวดล้อมที่สังคมเผชิญ ริเริ่มกิจกรรมเพื่อประโยชน์ต่อส่วนรวมในการพัฒนาชุมชนท้องถิ่นในการรักษาสิ่งแวดล้อม

ทั้งนี้ ตั้งแต่วันที่ 7 กุมภาพันธ์ พ.ศ. 2568 เป็นต้นไป

ประกาศ ณ วันที่ 7 กุมภาพันธ์ พ.ศ. 2568



ประธาน

ภาคผนวก ข.2-3

เอกสารการจัดตั้งคณะกรรมการติดตามตรวจสอบ
ผลกระทบสิ่งแวดล้อม และรายงานการประชุม

ประกาศบริษัทฯ

เลขที่ SE005/2024

เรื่อง แต่งตั้งคณะกรรมการติดตามตรวจสอบผลกระทบสิ่งแวดล้อม และประชาสัมพันธ์โครงการ

เพื่อสร้างความสัมพันธ์ที่ดีกับชุมชนโดยรอบ และเพื่อเป็นการปฏิบัติตามมาตรการติดตามตรวจสอบผลกระทบสิ่งแวดล้อม บริษัท โพสโค ไคท์เต็ด สตีล (ประเทศไทย) จำกัด จึงขอแต่งตั้งคณะกรรมการติดตามตรวจสอบผลกระทบสิ่งแวดล้อม และประชาสัมพันธ์โครงการ จำนวน 24 คน ดังนี้

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|-----|--|--|
| 1. | | ผู้อำนวยการสำนักงานนิคมอุตสาหกรรมอมตะซิตี้ |
| 2. | | ผู้อำนวยการโรงเรียนบ้านปอวิน |
| 3. | | ผู้แทนองค์การบริหารส่วนตำบลมาบยางพร |
| 4. | | ผู้แทนองค์การบริหารส่วนตำบลเขาไม้แก้ว |
| 5. | | ผู้แทนองค์การบริหารส่วนตำบลบ่อวิน |
| 6. | | ตัวแทนเทศบาลตำบลตะเคียนเตี้ย |
| 7. | | ผู้แทนประชาชนหมู่ 2 บ้านเนินสุวรรณ |
| 8. | | ผู้แทนประชาชนหมู่ 3 บ้านมาบยางพร |
| 9. | | ผู้แทนประชาชนหมู่ 3 บ้านมาบยางพร |
| 10. | | ผู้แทนประชาชนหมู่ 3 บ้านมาบยางพร |
| 11. | | ผู้แทนประชาชนหมู่ 4 บ้านห้วยปราบ |
| 12. | | ผู้แทนประชาชนหมู่ 5 บ้านมาบยางพรใหม่ |
| 13. | | ผู้แทนประชาชนหมู่ 6 บ้านมาบยางพรใหม่ |
| 14. | | ผู้แทนประชาชนหมู่ 6 บ้านมาบยางพรใหม่ |
| 15. | | ผู้แทนประชาชนหมู่ 6 บ้านมาบยางพรใหม่ |
| 16. | | ผู้แทนประชาชนหมู่ 2 บ้านบ้านมาบข่าหวาน |
| 17. | | ผู้แทนประชาชนหมู่ 3 บ้านหนองยาง |
| 18. | | ผู้แทนประชาชนหมู่ 4 บ้านห้วยไผ่เฒ่า |
| 19. | | ผู้แทนประชาชนหมู่ 5 บ้านภูไทร |
| 20. | | ผู้แทนประชาชนหมู่ 3 บ้านห้วยปราบ |
| 21. | | ผู้แทนประชาชนหมู่ 5 บ้านโป่งสะแก |
| 22. | | ผู้บริหาร/ผู้แทนโครงการ |
| 23. | | ผู้จัดการทั่วไปความปลอดภัยและนวัตกรรม/ ผู้แทนโครงการ |
| 24. | | ผู้จัดการทั่วไปฝ่ายประชาสัมพันธ์/ผู้แทนโครงการ |

โดยคณะกรรมการฯ มีหน้าที่ ดังต่อไปนี้

1. ให้ความรู้และฝึกอบรมให้กับชุมชนรับรู้และเข้าใจเกี่ยวกับมลพิษสิ่งแวดล้อมจากกิจกรรมของโครงการ และทำการสื่อสารให้กับชุมชนรับทราบและเข้าใจเกี่ยวกับวิธีสังเกตความผิดปกติของคุณภาพสิ่งแวดล้อม และประชาสัมพันธ์โครงการ และขั้นตอนแจ้งกลับ เพื่อปรับปรุงแก้ไขความผิดปกติที่เกิดขึ้นอย่างทันท่วงที
2. ตรวจสอบโครงการ รับรู้ถึงกระบวนการตรวจวัดคุณภาพสิ่งแวดล้อม และผลการตรวจวัดคุณภาพสิ่งแวดล้อม เพื่อแสดงความโปร่งใส ในการบริหารจัดการสิ่งแวดล้อมของโครงการ
3. วิเคราะห์แนวโน้มของสถานการณ์คุณภาพสิ่งแวดล้อมของประชาชนที่อาศัยอยู่โดยรอบโครงการและสุขภาพร่วมกัน
4. ร่วมปรึกษาหารือและกำหนดแนวทางป้องกันและแก้ไขปัญหาที่อาจส่งผลกระทบต่อสิ่งแวดล้อมและสุขภาพร่วมกัน
5. พิจารณาแก้ไขปัญหาข้อขัดแย้ง ข้อพิพาท การพิจารณาการชดเชยทั้งการตรวจสอบการกำหนดและการจ่ายค่าชดเชยรูปแบบต่าง ๆ นอกเหนือตามกฎหมายกำหนด หากเป็นปัญหาจากโครงการในกรณีหากพิสูจน์ได้ว่าโครงการก่อให้เกิดความเสียหายแก่ชีวิต และทรัพย์สินรวมทั้งพืชผล สัตว์เลี้ยง หรือทรัพย์สินอื่น ๆ
6. ทำการประเมินผลความสำเร็จของการติดตามการเฝ้าระวังผลกระทบด้านสิ่งแวดล้อม และสุขภาพ เพื่อให้ในการทบทวนรูปแบบและวิธีการในการทำงานให้มีความเหมาะสมกับสถานการณ์ที่เกิดขึ้นในแต่ละปีที่แตกต่างกันอย่างน้อยปีละ 1 ครั้ง
7. ให้คำปรึกษา เสนอแนะแนวทาง และประสานงานในการดำเนินกิจกรรมร่วมกับชุมชน รวมทั้งการเผยแพร่ข้อมูลข่าวสารของโครงการต่อประชาชนที่อยู่รอบพื้นที่โครงการ
8. ร่วมปรึกษาหารือ รวมถึงการแลกเปลี่ยนข้อมูลข่าวสาร เพื่อการติดตามผลการดำเนินการ และแก้ไขปัญหา ร่วมกัน ระหว่างโครงการ ชุมชน และหน่วยงานต่าง ๆ ซึ่งจะก่อให้เกิดประสิทธิภาพและสัมฤทธิ์ผล
9. ร่วมพัฒนาโครงการ พัฒนาชุมชน และสังคมรอบที่ตั้งโครงการ รวมทั้งให้ข้อเสนอแนะเพื่อปรับปรุงโครงการให้มีความเหมาะสมทั้งด้านเศรษฐกิจ สังคม สิ่งแวดล้อม และสุขภาพชุมชน
10. คณะกรรมการฯ สามารถแต่งตั้งบุคคลหรือคณะบุคคลขึ้นมา เพื่อดำเนินการเฉพาะกิจ อันมีเหตุที่เกิดขึ้นมาจากการพัฒนาโครงการ

โดยคณะกรรมการฯ มีวาระตั้งแต่วันที่ 1 มกราคม 2567



ผู้แทนบริษัท

บริษัท โพสโค ไคท์เต็ด สตีล (ประเทศไทย) จำกัด

รายงานการประชุม			ผู้เขียน	ผู้ตรวจสอบ	ผู้อนุมัติ	
หัวข้อการประชุม : การติดตามตรวจสอบผลกระทบด้านสิ่งแวดล้อมและประชาสัมพันธ์โครงการ ประจำปี 2567						
วันที่ :	20 สิงหาคม 2567	เวลา :	10:00-12:00 น.	สถานที่ :	อาคารสำนักงานชั้น 2	
รายชื่อผู้เข้าร่วมประชุม :						
ลำดับ	รายชื่อ	ตำแหน่ง	หน่วยงาน			
1.		ผู้อำนวยการสำนักงานการนิคมอุตสาหกรรมอมตะซิตี้ ระยอง	การนิคมอุตสาหกรรมอมตะซิตี้ ระยอง (ตัวแทนภาครัฐและท้องถิ่น)			
2.		วิศวกร 5	การนิคมอุตสาหกรรมอมตะซิตี้ ระยอง (ตัวแทนภาครัฐและท้องถิ่น)			
3.		ปลัดอบต.รักษาการแทนผอ.กองสาธารณสุข	อบต. เขาไม้แก้ว (ตัวแทนภาครัฐและท้องถิ่น)			
4.		ผู้อำนวยการกองสาธารณสุขและสิ่งแวดล้อม	อบต. มาบยางพร (ตัวแทนภาครัฐและท้องถิ่น)			
5.		ผู้อำนวยการกองสาธารณสุขและสิ่งแวดล้อม	อบต. ตะเคียนเตี้ย (ตัวแทนภาครัฐและท้องถิ่น)			
6.		รองผู้อำนวยการโรงเรียนบ้านปอวิน	โรงเรียนบ้านปอวิน (สถาบันการศึกษาในพื้นที่)			
7.		-	ผู้แทนประชาชนตำบลมาบยางพร หมู่ที่ 2			
8.		-	ผู้แทนประชาชนตำบลมาบยางพร หมู่ที่ 3			
9.		-	ผู้แทนประชาชนตำบลมาบยางพร หมู่ที่ 3			
10.		-	ผู้แทนประชาชนตำบลมาบยางพร หมู่ที่ 3			
11.		-	ผู้แทนประชาชนตำบลมาบยางพร หมู่ที่ 3			
12.		-	ผู้แทนประชาชนตำบลมาบยางพร หมู่ที่ 4			
13.		-	ผู้แทนประชาชนตำบลมาบยางพร หมู่ที่ 6			
14.		-	ผู้แทนประชาชนตำบลมาบยางพร หมู่ที่ 6			
15.		-	ผู้แทนประชาชนตำบลมาบยางพร			
16.		-	ผู้แทนประชาชนตำบลเขาไม้แก้ว หมู่ที่ 2			
17.		-	ผู้แทนประชาชนตำบลเขาไม้แก้ว หมู่ที่ 3			
18.		-	ผู้แทนประชาชนตำบลเขาไม้แก้ว หมู่ที่ 4			
19.		-	ผู้แทนประชาชนตำบลเขาไม้แก้ว หมู่ที่ 5			
20.		-	ผู้แทนประชาชนตำบลเขาไม้แก้ว			
21.		-	ผู้แทนประชาชนตำบลเขาไม้แก้ว			
22.		-	ผู้แทนประชาชนตำบลตะเคียนเตี้ย หมู่ที่ 5			
23.		-	ผู้แทนประชาชนตำบลตะเคียนเตี้ย หมู่ที่ 5			
24.		ผู้บริหาร	บริษัท โพลโค ไค้ท์เด็ค สตีล (ประเทศไทย) จำกัด			
25.		ผู้บริหาร	บริษัท โพลโค ไค้ท์เด็ค สตีล (ประเทศไทย) จำกัด			

26.		ผู้บริหาร	บริษัท โพลโค ไคท์เด็ค สตีล (ประเทศไทย) จำกัด
27.		ผู้เชี่ยวชาญด้านเทคนิค	บริษัท โพลโค ไคท์เด็ค สตีล (ประเทศไทย) จำกัด
28.		ผู้จัดการทั่วไปฝ่ายความปลอดภัยฯ	บริษัท โพลโค ไคท์เด็ค สตีล (ประเทศไทย) จำกัด
29.		ผู้จัดการทั่วไปฝ่ายซ่อมบำรุง	บริษัท โพลโค ไคท์เด็ค สตีล (ประเทศไทย) จำกัด
30.		ผู้จัดการทั่วไปฝ่ายผลิต	บริษัท โพลโค ไคท์เด็ค สตีล (ประเทศไทย) จำกัด
31.		ผู้จัดการทั่วไปฝ่ายชุมชนสัมพันธ์	บริษัท โพลโค ไคท์เด็ค สตีล (ประเทศไทย) จำกัด
32.		หัวหน้าฝ่ายความปลอดภัย	บริษัท โพลโค ไคท์เด็ค สตีล (ประเทศไทย) จำกัด
33.		เจ้าหน้าที่ความปลอดภัยโครงการ	บริษัท โพลโค ไคท์เด็ค สตีล (ประเทศไทย) จำกัด
34.		เจ้าหน้าที่สิ่งแวดล้อมโครงการ	บริษัท โพลโค ไคท์เด็ค สตีล (ประเทศไทย) จำกัด

วาระที่	รายละเอียดสาระสำคัญ	ผู้รับผิดชอบ	วันที่แล้วเสร็จ
1.	ผู้แทนบริษัทกล่าวต้อนรับ - ผู้แทนบริษัทโพสโก โค้ทเต็ด สตีล (ประเทศไทย) จำกัด นายโอ แด กีน กล่าวต้อนรับ คณะกรรมการติดตามตรวจสอบฯ พร้อมกับกล่าวถึงการดำเนินงานของบริษัทฯ ที่ให้ความสำคัญด้านสิ่งแวดล้อมอย่างมาก โดยมุ่งเน้นในการใช้ทรัพยากรอย่างคุ้มค่า โดยการลดการใช้ทรัพยากรต่าง ๆ อาทิ ลดการใช้พลังงานไฟฟ้าในกระบวนการผลิต ลดการใช้น้ำ ลดปริมาณการเกิดของเสียต่างๆ ให้มากที่สุด และได้เฝ้าติดตามตรวจสอบมลภาวะตามระยะเวลาที่กฎหมายกำหนด ซึ่งพบว่าทุกค่าอยู่ในเกณฑ์ที่มาตรฐานกำหนด - ในปี 2024 บริษัทฯ ยังคงดำเนินกิจกรรมที่เกี่ยวข้องกับการจัดการด้านสิ่งแวดล้อมอย่างต่อเนื่อง เช่น โครงการ Waste Management Award กับ ทางภาคนิคมอุตสาหกรรมและโครงการ Carbon footprint for organization, การจัดกิจกรรม CSR เพื่อชุมชนอย่างต่อเนื่อง และยังมีแผนการเปลี่ยนพลังงานแสงอาทิตย์เป็นพลังงานไฟฟ้าอีกด้วย	-	-
2.	ประธานคณะกรรมการฯ กล่าวเปิดประชุม และแนะนำตัว - นายเสริมพงศ์ สุโข ประธานคณะกรรมการฯ กล่าวเปิดประชุมการติดตามตรวจสอบผลกระทบด้านสิ่งแวดล้อม ประจำปี 2567 โดยได้กล่าวถึงวัตถุประสงค์ในการจัดประชุมฯ เพื่อดำเนินการตามข้อกำหนดของสำนักงานนโยบายและแผนทรัพยากรธรรมชาติและสิ่งแวดล้อม เรื่องการชี้แจงผลการดำเนินงานด้านการติดตามตรวจสอบผลกระทบสิ่งแวดล้อมตามรายการการประเมินผลกระทบสิ่งแวดล้อมที่กำหนดให้โรงงานจัดทำในทุกๆ ปี พร้อมกับให้คณะกรรมการฯ และตัวแทนทุกฝ่ายได้กล่าวแนะนำตัว	-	-
3.	ติดตามการประชุมครั้งที่ผ่านมา จากการประชุมครั้งที่ผ่านมามีงานที่ต้องติดตาม 4 ข้อ ดังนี้ 1.1) คุณกนกกาญจน์สอบถามแผนในการก่อสร้างระบบบำบัดมลพิษทางอากาศ ตามรายงานการเปลี่ยนแปลงรายละเอียดโครงการ ครั้งที่ 5 มีแผนจะสร้างเมื่อไหร่ และกำชับให้แจ้งทางภาคนิคมอุตสาหกรรมรับทราบก่อนดำเนินการก่อสร้าง - ปัจจุบันโครงการอยู่ระหว่างการออกแบบระบบบำบัดมลพิษทางอากาศ Wet Scrubber ตัวใหม่ มีแปลนจะแล้วเสร็จ และเริ่มก่อสร้างในช่วงต้นปี 2567 และจะทำการแจ้งทางภาคนิคมอุตสาหกรรมทราบก่อนเริ่มดำเนินการก่อสร้าง 1.2) คุณกนกกาญจน์ บริษัทฯ มีระบบมาตรฐานการรับรองทั้งสากล และระดับประเทศ ทั้งในด้านสิ่งแวดล้อม ความปลอดภัยและด้านสังคม จึงเสนอแนะบริษัทฯ เข้าร่วมโครงการเพื่อรับรางวัลเพิ่มเติม เช่น โครงการอุตสาหกรรมดีเด่น, โรงงานอุตสาหกรรมเชิงนิเวศ อุตสาหกรรมสีเขียวระดับที่ 4 - บริษัทฯ ได้สมัครเข้าร่วมโครงการสนับสนุนโรงงานอุตสาหกรรมให้ได้รับการรับรองมาตรฐานที่สนับสนุนการเป็นเมืองอุตสาหกรรมเชิงนิเวศ ประจำปีงบประมาณ 2566 กับทางภาคนิคมอุตสาหกรรมอมตะซิตี้ ระยอง เรียบร้อยแล้ว 1.3) คุณกนกกาญจน์สอบถามโครงการบริจาคสารปรับปรุงดิน เป็นกากตะกอนจากสวนโศ และมีการตรวจสอบคุณสมบัติของกากตะกอนหรือไม่	-	-

	<p>- บริษัทฯ ได้นำกากตะกอนจากระบบบำบัดน้ำเสียที่มาจากกระบวนการผลิตทั้งหมด โดยมีการแยกน้ำเสียที่มีสารปนเปื้อนโลหะหนักส่งกำจัดกับบริษัท เบตเตอร์ เวิลด์ กรีน จำกัด (มหาชน) และมีการนำกากตะกอนน้ำเสียไปตรวจสอบความเป็นอันตราย โลหะหนัก และมีการขออนุญาตหน่วยงานที่เกี่ยวข้องอย่างถูกต้องครบถ้วน</p> <p>1.4) คุณกึ่งเพชร เสนอแนะให้บริษัทฯ นำเสนอภาพการบริจาคปุ๋ยให้กับเกษตรกรให้คณะกรรมการฯ รับทราบในการประชุมในครั้งถัดไป</p> <p>- บริษัทฯ รับทราบ และจะดำเนินการในการประชุมครั้งถัดไป</p> <p>2.) ด้านสังคมและเศรษฐกิจ;</p> <p>2.1) คุณรัตติยา เสนอแนะให้บริษัทฯ เพิ่มการทำกิจกรรม CSR ในพื้นที่ตำบลบางยางพร</p> <p>- บริษัทฯ รับทราบ และจะนำข้อเสนอแนะดังกล่าวไปพิจารณาร่วมกับทางทีมผู้บริหาร</p> <p>2.2) คุณณัฏฐนิชา เสนอแนะเนื่องจากในอดีตบริษัทฯ เคยให้ความร่วมมือและสนับสนุน การสอนภาษาเกาหลีให้กับนักเรียนชั้นมัธยมศึกษาปีที่ 3 และนักเรียนที่สนใจ จึงสอบถามทางบริษัทฯ ในปีนี้จะมีโครงการใด อย่างนี้อีกหรือไม่</p> <p>- ทางบริษัทฯ จะนำข้อเสนอแนะดังกล่าวไปพิจารณาในการสนับสนุนบุคลากรในการสอนภาษาเกาหลี หรือภาษาอังกฤษ</p>																																																																																																											
4.	<p>ผลการปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบด้านสิ่งแวดล้อม</p> <p>- ตัวแทนบริษัทฯ ได้นำเสนอการปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบด้านสิ่งแวดล้อม ประจำปี เดือน มกราคม – มิถุนายน 2567 โดยสรุป ได้ดังนี้</p> <table><tr><th>รายการประเมินผลกระทบสิ่งแวดล้อม (ตามตาราง)</th><th>ค่าเฉลี่ยค่าเฉลี่ย</th><th>ค่าเฉลี่ยค่าเฉลี่ย</th><th>ค่าเฉลี่ยค่าเฉลี่ย</th><th>ค่าเฉลี่ยค่าเฉลี่ย</th></tr><tr><td>1. ด้านสิ่งแวดล้อม</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>2. ด้านสังคม</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>3. ด้านเศรษฐกิจ</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>4. ด้านการดำเนินงาน</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>5. ด้านการดำเนินงาน</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>6. ด้านการดำเนินงาน</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>7. ด้านการดำเนินงาน</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>8. ด้านการดำเนินงาน</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>9. ด้านการดำเนินงาน</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>10. ด้านการดำเนินงาน</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>11. ด้านการดำเนินงาน</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>12. ด้านการดำเนินงาน</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>13. ด้านการดำเนินงาน</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>14. ด้านการดำเนินงาน</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>15. ด้านการดำเนินงาน</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>16. ด้านการดำเนินงาน</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>17. ด้านการดำเนินงาน</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>18. ด้านการดำเนินงาน</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>19. ด้านการดำเนินงาน</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>20. ด้านการดำเนินงาน</td><td>8</td><td>8</td><td>8</td><td>8</td></tr></table> <p>ซึ่งผลการดำเนินการตามมาตรการ 190 ข้อ ปฏิบัติตามครบถ้วน</p>	รายการประเมินผลกระทบสิ่งแวดล้อม (ตามตาราง)	ค่าเฉลี่ยค่าเฉลี่ย	ค่าเฉลี่ยค่าเฉลี่ย	ค่าเฉลี่ยค่าเฉลี่ย	ค่าเฉลี่ยค่าเฉลี่ย	1. ด้านสิ่งแวดล้อม	8	8	8	8	2. ด้านสังคม	8	8	8	8	3. ด้านเศรษฐกิจ	8	8	8	8	4. ด้านการดำเนินงาน	8	8	8	8	5. ด้านการดำเนินงาน	8	8	8	8	6. ด้านการดำเนินงาน	8	8	8	8	7. ด้านการดำเนินงาน	8	8	8	8	8. ด้านการดำเนินงาน	8	8	8	8	9. ด้านการดำเนินงาน	8	8	8	8	10. ด้านการดำเนินงาน	8	8	8	8	11. ด้านการดำเนินงาน	8	8	8	8	12. ด้านการดำเนินงาน	8	8	8	8	13. ด้านการดำเนินงาน	8	8	8	8	14. ด้านการดำเนินงาน	8	8	8	8	15. ด้านการดำเนินงาน	8	8	8	8	16. ด้านการดำเนินงาน	8	8	8	8	17. ด้านการดำเนินงาน	8	8	8	8	18. ด้านการดำเนินงาน	8	8	8	8	19. ด้านการดำเนินงาน	8	8	8	8	20. ด้านการดำเนินงาน	8	8	8	8		
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5.	<p>ถาม-ตอบ และ ข้อเสนอแนะ</p> <p>1.) ด้านสิ่งแวดล้อม;</p> <p>1) คุณเสริมพงศ์ (ผอ.กนอ.อมตะซิตี้ ระยอง) สอบถามเรื่องใบอนุญาตก่อสร้างโรงงาน และเน้นย้ำให้ดำเนินการตามระยะเวลาที่กฎหมายกำหนด</p> <p>- บริษัทฯ รับทราบ และจะดำเนินการตามกฎหมายกำหนดอย่างเคร่งครัด</p> <p>3) คุณเสริมพงศ์ (ผอ.กนอ.อมตะซิตี้ ระยอง) จากค่าผลการตรวจวัดคุณภาพน้ำทิ้งในหน้าที่ 54 ในส่วนของค่า Oil & Grease เนื่องจากค่าที่ได้ไม่เกินกว่าที่มาตรฐานกำหนด แต่มีข้อสงสัยว่าทำไมค่าที่วัดได้ในรอบ 24 พ.ค. 67 จึงมากกว่ารอบอื่นๆ</p> <p>- ได้ทำการตรวจสอบแล้วไม่พบความผิดปกติของเครื่องจักร และการดำเนินการบำบัด ทั้งนี้บริษัทฯ มีการตรวจวัดคุณภาพน้ำเสียเป็นประจำโดยห้องปฏิบัติการของบริษัท หากพบว่ามีความสูงเกินมาตรฐานกำหนด ทางบริษัทจะนำน้ำเสียไปบำบัดซ้ำ เพื่อให้ค่าผ่านเกณฑ์มาตรฐานกำหนด ก่อนปล่อยสู่ระบบบำบัดน้ำเสียส่วนกลางของภาคนิคมฯ</p>	Safety	ภายในปี 2567																																																																																																									
		Safety	ตลอดระยะดำเนินการ																																																																																																									

	<p>4) คุณธวัชชัย (รอง ผอ. โรงเรียนบ้านปอวิน) ขอให้มีการรายงานสรุปเกี่ยวกับผลการตรวจสอบภาพของพนักงานลงในรายงานด้วย</p> <p>- บริษัทรับทราบและจะดำเนินการในการประชุมครั้งถัดไป</p> <p>5) คุณสุวิระ (ตัวแทนตำบลเขาไม้แก้ว) ทางบริษัทฯ ได้มีการนำ NG มาใช้เป็นเชื้อเพลิงให้กับ Boiler และได้มีการตรวจสอบตามรอบประจำปีหรือไม่</p> <p>- บริษัทมีการนำ NG มาใช้เป็นเชื้อเพลิงสำหรับ Boiler และได้มีการตรวจสอบเป็นประจำทุกปี พร้อมทั้งส่งรายงานไปยังสำนักเทคโนโลยีความปลอดภัย กรมโรงงานอุตสาหกรรมตามกฎหมายกำหนด</p>		
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ปิดประชุม 12:00 น.

ผู้บันทึกการประชุม



ภาคผนวก ข.2-4

เอกสารการใช้ก๊าซธรรมชาติเป็นเชื้อเพลิง

ปริมาณการใช้ก๊าซธรรมชาติ (NG) เป็นเชื้อเพลิง ประจำปี 2568 (หน่วย SCM)

มกราคม	กุมภาพันธ์	มีนาคม	เมษายน	พฤษภาคม	มิถุนายน	กรกฎาคม	สิงหาคม	กันยายน	ตุลาคม	พฤศจิกายน	ธันวาคม
812,443.00	915,710.00	936,231.00	906,018.00	1,063,740.00	988,070.00						

ภาคผนวก ข.2-5

การตรวจสภาพเครื่องจักรหรืออุปกรณ์ที่ใช้ในโรงงาน (PM Plan)

Section 1: Sink Roll		Work Detail		Schedule												Manpower Used & Initiation Source	
No.	Facility				Jan	27	23	29	30	1	2	3	4				
17	Zinc Pot	Take Out Pot Roll Frame No. 9953 1-4	Plan													Manpower: Khankhais, Moritas, Pizano, Zeng and Chantelani	
		W/O: 71299334														Requester: Khankhais	Work Permit No. 1553
		S-Code: -														Initiation Source: Moritas, Pizano, Zeng and Chantelani	
18	Sink Roll Shop	Overhaul Top Air Bell No. 2	Plan													Manpower: Khankhais	Work Permit No. -
		W/O: 71352126														Initiation Source: -	
		S-Code: -														Manpower: Moritas, Pizano, Zeng and Chantelani	Work Permit No. 1554, 1555
19	Zinc Pot	Change Sink Roll (Include W/O and 22 Metal Pump)	Plan													Manpower: Khankhais, Moritas, Pizano, Zeng and Chantelani	Work Permit No. 1553
		W/O: 71357154														Initiation Source: -	
		S-Code: -														Manpower: Khankhais	Work Permit No. 1554, 1555
20	Zinc Pot	Check Angle Air Valve Top and Bottom	Plan													Manpower: Khankhais, Moritas, Pizano, Zeng and Chantelani	Work Permit No. 1553
		W/O: 71357154														Initiation Source: -	
		S-Code: -														Manpower: Khankhais	Work Permit No. 1554, 1555
21	Sink Roll Shop	Weld side protection plate at sink roll frame 1-1	Plan													Manpower: Khankhais, Moritas, Pizano, Zeng and Chantelani	Work Permit No. -
		W/O: -														Initiation Source: -	
		S-Code: -														Manpower: Khankhais	Work Permit No. -
22	Zinc Pot	Install Pot Roll Frame No. 9953 1-1	Plan													Manpower: Chantelani, Moritas, Pizano, Zeng and Chantelani	Work Permit No. 1557
		W/O: 71357257														Initiation Source: -	
		S-Code: -														Manpower: Khankhais	Work Permit No. 1557

Outsourced Contract Maintenance/Repairing Schedule Plan

Section 2: Sink Roll		Work Detail		Schedule												Manpower Used & Initiation Source	
No.	Facility				Jan	27	23	29	30	1	2	3	4				
23	Zinc Pot	Take Out Pot Roll Frame No. 9953 1-4	Plan													Manpower: Khankhais, Moritas, Pizano, Zeng and Chantelani	Work Permit No. 1553
		W/O: 71299334														Requester: Khankhais	Work Permit No. 1553
		S-Code: -														Initiation Source: Moritas, Pizano, Zeng and Chantelani	
24	Sink Roll Shop	Overhaul Top Air Bell No. 2	Plan													Manpower: Khankhais	Work Permit No. -
		W/O: 71352126														Initiation Source: -	
		S-Code: -														Manpower: Moritas, Pizano, Zeng and Chantelani	Work Permit No. 1554, 1555
25	Zinc Pot	Change Sink Roll (Include W/O and 22 Metal Pump)	Plan													Manpower: Khankhais, Moritas, Pizano, Zeng and Chantelani	Work Permit No. 1553
		W/O: 71357154														Initiation Source: -	
		S-Code: -														Manpower: Khankhais	Work Permit No. 1554, 1555
26	Zinc Pot	Check Angle Air Valve Top and Bottom	Plan													Manpower: Khankhais, Moritas, Pizano, Zeng and Chantelani	Work Permit No. 1553
		W/O: 71357154														Initiation Source: -	
		S-Code: -														Manpower: Khankhais	Work Permit No. 1554, 1555
27	Sink Roll Shop	Weld side protection plate at sink roll frame 1-1	Plan													Manpower: Khankhais, Moritas, Pizano, Zeng and Chantelani	Work Permit No. -
		W/O: -														Initiation Source: -	
		S-Code: -														Manpower: Khankhais	Work Permit No. -
28	Zinc Pot	Install Pot Roll Frame No. 9953 1-1	Plan													Manpower: Chantelani, Moritas, Pizano, Zeng and Chantelani	Work Permit No. 1557
		W/O: 71357257														Initiation Source: -	
		S-Code: -														Manpower: Khankhais	Work Permit No. 1557

Outsourced Contract Maintenance/Repairing Schedule Result

the NCHRP-20's due to

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Journal of Internal Medicine 250: 101–108

PLASMA-CELL SWARM

Outsourced Contract Maintenance/Repairing Schedule Result

Summary/Remark Item

Cancel item :

Reason :

Counter measure :

Present situation :

Decision : ☐ OK ☐ NO OK

Remark : If decision of maintenance general manager is not O.K., that mean can't start production line.

Section : Entry

No.	Facility	Work Detail		Schedule					Manpower Used & Initiation Source	
				Feb		March				
				28	1	2	3	4		
1	POR no.1	Uninstall and install entry strip guide table conveyor belt at POR no.1.	Plan						Manpower Requester Tanasak Initiation Source Anirawat Work Permit No. 2076/2077	
	W/O T1308879 S-Code 50187082	Cause: For conveyor belt exchange.	Actual							
2	Winger Roll No.21	Change top/bottom Winger roll no.21.	Plan						Manpower Requester Tanasak Initiation Source Aekkwat Work Permit No. 2078	
	W/O T1308916 S-Code 50187733	Cause: Found surface damage.	Actual							
3	Winger Roll No.23	Change top/bottom Winger roll no.23.	Plan						Manpower Requester Tanasak Initiation Source Aekkwat Work Permit No. 2079	
	W/O T1309140 S-Code 50214018	Cause: Found surface damage.	Actual							
4	Alkali Brush Unit 2	Change top Alkali brush roll no.3-2	Plan						Manpower Requester Tanasak Initiation Source Aekkwat Work Permit No. 0358/0359	
	W/O T1309200 S-Code 50214018	Cause: Roll diameter has minimum.	Actual							
5	Alkali Brush Unit 1	Change bottom Alkali brush roll no.3-4.	Plan						Manpower Requester Tanasak Initiation Source Aekkwat Work Permit No. 0360/0361	
	W/O T1309205 S-Code 50214124	Cause: Roll surface damage.	Actual							
6	Alkali Brush Unit 1	Change pin screw jack at top Alkali brush roll no.3-2.	Plan						Manpower Requester Tanasak Initiation Source Aekkwat Work Permit No. 2084	
	W/O T1309340 S-Code 50229520	Cause: Pin screw jack damage.	Actual						0465075+ 2 Z	

Section : Center 1

No.	Facility	Work Detail		Schedule					Manpower Used & Initiation Source	
				Feb		March				
				28	1	2	3	4		
7	Top Roll No.2	Change W-packing seal at Top roll no.2.	Plan						Manpower Requester Tanat Initiation Source Sanchand Work Permit No. 0365	
	W/O T1308940 S-Code 50200604	Cause: Found W-packing seal leakage.	Actual							
8	Top Roll No.3	Repairing cooling water hose at Top roll no.3.	Plan						Manpower Requester Tanat Initiation Source Sanchand Work Permit No. 2025	
	W/O T1309148 S-Code 50191083	Cause: Found cooling water hose touching fan.	Actual							
9	Furnace	Install insulation at Furnace wall.	Plan						Manpower Requester Tanat Initiation Source Sanchand Work Permit No. 0366	
	W/O T1309434 S-Code 50205621	Cause: Found high temperature on furnace wall.	Actual							
10	C2 Defl Ro-2	Greasing machine at C2 Defl roll-steering roll no.7. (Item 25-20)	Plan						Manpower Requester Tanat Initiation Source Sanchand Work Permit No. 0167	
	W/O T1309435 S-Code 50221296	Cause: PM major failure.	Actual							
11	Furnace	Welding guide bar lock top lung at Furnace.	Plan						Manpower Requester Tanat Initiation Source Sanchand Work Permit No. 0368	
	W/O T1309532 S-Code 50187218	Cause: Found guide bar broken.	Actual							
12	Furnace	Change oil bearing bearing roll at furnace	Plan						Manpower Requester Tanat Initiation Source Sanchand Work Permit No. 0369	
	W/O T13089435 S-Code 50215530	Cause: Found oil deteriorate.	Actual							
13	Furnace	Changing bearing of all fan blower at Furnace.	Plan						Manpower Requester Tanat Initiation Source Sanchand Work Permit No. 2007	
	W/O T13095340 S-Code 50225884	Cause: Found bearing oil level.	Actual							
14	Furnace	Change air silencer air dryer at Furnace.	Plan						Manpower Requester Tanat Initiation Source Sanchand Work Permit No. 2068	
	W/O T1309136 S-Code 50127038	Cause: Found silencer deteriorate.	Actual							
15	Hot Inlet Fan No.4-2	Changing gear oil leakage at Hot Inlet fan no.4-2	Plan						Manpower Requester Tanat Initiation Source Sanchand Work Permit No. 2049	
	W/O T13091320 S-Code 50140020	Cause: Found gear oil leakage.	Actual							

Section : Center 1																
No.	Facility	Work Detail	Schedule					Manpower Used & Initiation Source								
			Feb	March												
			28	1	2	3	4	Manpower Requester	Tanat	5	A	1	B	2	C	
7	Top Roll No.2	Change v-packing seal at Top roll no.2.	Plan						Manpower Requester	Tanat	5	A	1 <td>B</td> <td>2<td>C</td></td>	B	2 <td>C</td>	C
	W/O T1309430 S-Code 50200454	Cause: Found v-packing seal leakage.	Actual						Initiation Source	Surachand						0365
8	Top Roll No.2	Repairing cooling water hose at Top roll no.1.	Plan						Manpower Requester	Tanat	5	A	1 <td>B</td> <td>2<td>C</td></td>	B	2 <td>C</td>	C
	W/O T1309481 S-Code 50191083	Cause: Found cooling water hose touching fence.	Actual						Initiation Source	Surachand						2075
9	Furnace	Install insulation at Furnace wall.	Plan						Manpower Requester	Tanat	5	A	1 <td>B</td> <td>2<td>C</td></td>	B	2 <td>C</td>	C
	W/O T1309434 S-Code 50203083	Cause: Found high temperature on furnace wall.	Actual						Initiation Source	Surachand						0255
10	C2 Def Roll Steering Roll No.7	Greasing machine at C2 Def roll-steering roll no.7. (Item 29-30)	Plan						Manpower Requester	Tanat	5	A	1 <td>B</td> <td>2<td>C</td></td>	B	2 <td>C</td>	C
	W/O T1309470 S-Code 50222296	Cause: PM major failure.	Actual						Initiation Source	Surachand						0167
11	Furnace	Welding guide bar lock top bung at Furnace.	Plan						Manpower Requester	Tanat	5	A	1 <td>B</td> <td>2<td>C</td></td>	B	2 <td>C</td>	C
	W/O T1309432 S-Code 50187216	Cause: Found guide bar broken.	Actual						Initiation Source	Surachand						0368
12	Furnace	Change all oil bearing hearth roll at furnace.	Plan						Manpower Requester	Tanat	5	A	1 <td>B</td> <td>2<td>C</td></td>	B	2 <td>C</td>	C
	W/O T1309436 S-Code 50215530	Cause: Found oil deterioration.	Actual						Initiation Source	Surachand						0369
13	Furnace	Change bearing oil all fan blower at Furnace.	Plan						Manpower Requester	Tanat	5	A	1 <td>B</td> <td>2<td>C</td></td>	B	2 <td>C</td>	C
	W/O T1309480 S-Code 50215534	Cause: Found bearing oil level.	Actual						Initiation Source	Surachand						2080
14	Furnace	Change air silencer air dryer at Furnace.	Plan						Manpower Requester	Tanat	5	A	1 <td>B</td> <td>2<td>C</td></td>	B	2 <td>C</td>	C
	W/O T1309486 S-Code 50215536	Cause: Found silencer deteriorate.	Actual						Initiation Source	Surachand						2088
15	Hot Bottle Roll No.4-2	Change gear oil leakage at Hot bottle roll no.4-2.	Plan						Manpower Requester	Tanat	5	A	1 <td>B</td> <td>2<td>C</td></td>	B	2 <td>C</td>	C
	W/O T1309488 S-Code 50215536	Cause: Found gear oil leakage.	Actual						Initiation Source	Surachand						2089

Section 1 : Caster-2				Schedule					Manpower Used & Initiation Source										
No.	Facility	Work Detail			Feb		March												
					28	1	2	3	4										
16	Roll Coater No.1-2	Change top/bottom Applicator roll at Roll coater no.1,2.		Plan						Manpower Requester	Phaya	S		A	1	B	2	C	
	W/O T1308914 S-Code 50187733	Cause: Roll period change.		Actual						Initiation Source	Sumet							Work Permit No.	0376/0377
17	Roll Coater No.1	Change hydraulic cylinder quick connect at Roll coater no.1.		Plan						Manpower Requester	Phaya	S		A	1	B	2	C	
	W/O T1308937 S-Code 50187087	Cause: Found hydraulic cylinder leakage.		Actual						Initiation Source	Sumet							Work Permit No.	0372
18	TBR No.5-2	Change top Snubber roll at TBR no.5-2.		Plan						Manpower Requester	Phaya	S		A	1	B	2	C	
	W/O T1308938 S-Code 50187016	Cause: Found polycarbonate damage.		Actual						Initiation Source	Sumet							Work Permit No.	0373
19	TBR No.6-1	Change top Snubber roll at TBR no.6-1.		Plan						Manpower Requester	Phaya	S		A	1	B	2	C	
	W/O T1308949 S-Code 50187018	Cause: Found polycarbonate damage.		Actual						Initiation Source	Sumet							Work Permit No.	0374
20	SPM Chiller Pump	Change gasket flange at SPM chiller pump no.3,2.		Plan						Manpower Requester	Phaya	S		A	1	B	2	C	
	W/O T1308953 S-Code 50187019	Cause: Found gasket flange deterioration.		Actual						Initiation Source	Sumet							Work Permit No.	0375
21	C3-CD Deflector Roll	Greasing machine at C3-CD Deflector roll (Item 31-32)		Plan						Manpower Requester	Phaya	S		A	1	B	2	C	
	W/O T1308952 S-Code 50221509	Cause: PM major failure.		Actual						Initiation Source	Sumet							Work Permit No.	0376
22	TBR No.6-4	Inspection gear coupling condition at TBR no.6-4.		Plan						Manpower Requester	Phaya	S		A	1	B	2	C	
	W/O T1309325 S-Code 50218005	Cause: Found gear coupling noise sound.		Actual						Initiation Source	Sumet							Work Permit No.	0370
23	SPM Cellar	Cleaning hydraulic oil leakage valve stand at SPM cellar.		Plan						Manpower Requester	Phaya	S		A	1	B	2	C	
	W/O T1309333 S-Code 50218144	Cause: Found hydraulic oil leakage.		Actual						Initiation Source	Sumet							Work Permit No.	0371

Section 1 : Delivery				Schedule					Manpower Used & Initiation Source										
No.	Facility	Work Detail			Feb		March												
					28	1	2	3	4										
24	TR No.2	Change hydraulic cylinder outboard swing up/down at TR no.2.		Plan						Manpower Requester	Kempha	S		A	1	B	2	C	
	W/O T1308942 S-Code 50187009	Cause: Found hydraulic cylinder leakage.		Actual						Initiation Source	Riddichai							Work Permit No.	0377
25	TR No.2	Change hydraulic cylinder bottom snubber roll at TR no.2.		Plan						Manpower Requester	Kempha	S		A	2	B	3	C	
	W/O T13089204 S-Code 50187000	Cause: Found hydraulic cylinder leakage.		Actual						Initiation Source	Riddichai							Work Permit No.	0378
26	Sample Car	Change air hose sample filter tilting at Sample car.		Plan						Manpower Requester	Kempha	S		A	1	B	2	C	
	W/O T13089307 S-Code 50187003	Cause: Found air hose deteriorated.		Actual						Initiation Source	Riddichai							Work Permit No.	0379
27	Scrap Baller	Change gear oil at Scrap baller.		Plan						Manpower Requester	Kempha	S		A	1	B	2	C	
	W/O T13089205 S-Code 50187023	Cause: Found gear oil level low.		Actual						Initiation Source	Riddichai							Work Permit No.	0380
28	Scrap Baller	Change gasket gear box at Scrap baller.		Plan						Manpower Requester	Kempha	S		A	1	B	2	C	
	W/O T13089042 S-Code 50187022	Cause: Found gear oil leakage.		Actual						Initiation Source	Riddichai							Work Permit No.	0381
29	Coil Car No.1	Repairing grease pipe line at coil car no.1		Plan						Manpower Requester	Kempha	S		A	1	B	2	C	
	W/O T13089215 S-Code 50218456	Cause: Found grease pipe line damage.		Actual						Initiation Source	Riddichai							Work Permit No.	0382
30	Exit Hydraulic Tank	Changing hydraulic oil at Exit hydraulic tank.		Plan						Manpower Requester	Kempha	S		A	1	B	2	C	
	W/O T13089214 S-Code 50216001	Cause: Found hydraulic oil level 75%.		Actual						Initiation Source	Riddichai							Work Permit No.	0383
31	TBR No.6-TR No.1	Greasing machine at TBR no.6-TR no.1. (Item 33-48)		Plan						Manpower Requester	Kempha	S		A	1	B	2	C	
	W/O T13089195 S-Code 50221226	Cause: PM major failure.		Actual						Initiation Source	Riddichai							Work Permit No.	0384
32	Walking Beam	Repairing hydraulic cylinder transverse at Walking beam.		Plan						Manpower Requester	Kempha	S		A	1	B	2	C	
	W/O T13089048 S-Code 50187357	Cause: Found hydraulic cylinder leakage.		Actual						Initiation Source	Riddichai							Work Permit No.	0385
33	Flying Cut Shear	Inspection spring shear knife condition at Flying cut shear.		Plan						Manpower Requester	Kempha	S		A	1	B	2	C	
	W/O T13089189 S-Code 50187649	Cause: PM plan.		Actual						Initiation Source	Riddichai							Work Permit No.	0372
34	Exit Pinch Roll	Install support cover universal joint at Exit pinch roll		Plan						Manpower Requester	Kempha	S		A	1	B	2	C	
	W/O T13089130 S-Code 50187674	Cause: Found support cover damage.		Actual						Initiation Source	Riddichai							Work Permit No.	0378

Section : Delivery		Work Detail		Schedule					Manpower Used & Initiation Source																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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24	TR No.2	• Change hydraulic cylinder outboard swing up/down at TR no.2.	Plan							Manpower Requester	Kempha	S		A	1	B	2	C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													

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154-622-7111, 8-4-00

Outsourced Contract Maintenance/Repairing Schedule Result

PLASMA-SPRAYED B-40

[illegible]

00-02254-211 Rev. 6/02

Ph.D. Student, U.S. Army Corps of Engineers

Maintenance/Repairing Schedule Result

Summary/Remarks Item

Cancel Item :

Reason :

Counter measure :

Present situation :

Decision : ☐ O.K. ☐ Not O.K.

Remarks : If decision of maintenance general manager is not O.K., that main can't start production line.

Section : Entry

No.	Facility	Work Detail	Schedule Date				Manpower Used & Initiation Source			
			July							
			1	2	3	4				
1	Coil Car No.1	• Restoring hydraulic cylinder lifting at Coil car no.1	Plan				Manpower Requester	Tipakorn,Arnpada,Nutthawit		
	W/O T13155435		Actual				Initiation Source	Kwanpracha Work Permit No. 4693		
	S-Code -	Cause: Hydraulic cylinder oil leakage.								
2	Welder	• Change hydraulic cylinder exit side guide no.1 at Welder.	Plan				Manpower Requester	Surachet, Weerayut,Chattawan		
	W/O T13155476		Actual				Initiation Source	Kwanpracha Work Permit No. 4698		
	S-Code -	Cause: Improvement project.								
3	Abrasive Brush Unit	• Change top/bottom Abrasive brush roll no.1, 3.	Plan				Manpower Requester	Tipakorn,Kritsada,Nutthawit,Chattawan		
	W/O T13155603		Actual				Initiation Source	Kwanpracha Work Permit No. 4691/4692		
	S-Code -	Cause: Roll diameter has minimum.						4693		
4	Entry	• Repairing air leakage at Entry section.	Plan				Manpower Requester	Kritsada, Surachet, Weerayut		
	W/O T13155433		Actual				Initiation Source	Kwanpracha Work Permit No. 4694/4695		
	S-Code -	Cause: Improvement project.								
5	Pre-Cleaning	• Change gasket flange solution at Pre-cleaning.	Plan				Manpower Requester	Jirina,Chattawan,Montian and Pitsanu		
	W/O T13155426		Actual				Initiation Source	Khanakorn Work Permit No. 4699		
	S-Code -	Cause: Improvement project.								

Section : Center-2

No.	Facility	Work Detail	Schedule Date				Manpower Used & Initiation Source			
			July							
			1	2	3	4				
6	MLT	• Change Hi-buffer stopper balance weight at MLT. [WS,DS]	Plan				Manpower Requester	Surachet, Weerayut		
	W/O T13155453		Actual				Initiation Source	Kwanpracha Work Permit No. 4696		
	S-Code -	Cause: Found Hi-buffer damaged.								
7	SPM	• Install ventilation fan blower at SPM celler.	Plan				Manpower Requester	Supplier (Well Engineering)		
	W/O T13155820		Actual				Initiation Source	Prasak Work Permit No. 4700		
	S-Code -	Cause: Repair shaft broken.								

Section : Delivery

No.	Facility	Work Detail	Schedule Date				Manpower Used & Initiation Source			
			July							
			1	2	3	4				
8	Banding Machine	• Change linear guide bearing at Banding machine.	Plan				Manpower Requester	Tipakorn,Kritsada,Nutthawit,Chattawan		
	W/O T131559673		Actual				Initiation Source	Kwanpracha Work Permit No. 5151		
	S-Code -	Cause: Found liner guide and bearing damage						Q4612187-1 Set		

Section : Sink Roll

No.	Facility	Work Detail	Schedule Date				Manpower Used & Initiation Source			
			July							
			1	2	3	4				
9	Zinc Pot	• Take out Pot roll frame no. PTCS 1-2.	Plan				Manpower Requester	Khanakorn,Montian,Pitsanu,Jirina and Chattawan		
	W/O T13157779		Actual				Initiation Source	Khanakorn Work Permit No. 1518		
	S-Code -	Cause: Ptd Plan.								
10	Air Knife	• Inspection and test Air knife with PD.	Plan				Manpower Requester	Jirina,Chattawan,Montian and Pitsanu		
	W/O T13157781		Actual				Initiation Source	Khanakorn Work Permit No. 1521		
	S-Code -	Cause: Exchange air knife								
11	Zinc Pot	• Install Pot roll frame no.PTCS 1-5.	Plan				Manpower Requester	Khanakorn,Montian,Pitsanu,Jirina and Chattawan		
	W/O T13157782		Actual				Initiation Source	Khanakorn Work Permit No. 1930		
	S-Code -	Cause: Ptd Plan.								

Outsourced Contract Maintenance/Repairing Schedule Plan

Section : Entry																
No.	Facility	Work Detail	Schedule Date				Manpower Used & Initiation Source				Safety Measures				Group with Inmate	
			1	2	3	4										
1	W/O T13155435 S-Code -	• Change hydraulic cylinder lifting at Coil car no.1	Plan				Manpower Requester	Tipakorn,Arnpada,Nutthawit					• Lifting operation machine - Lifting No. 4693-2P			
		• Cause: Hydraulic cylinder oil leakage.		Actual				Initiation Source	Kwanpracha Work Permit No. 4693							
2	W/O T13155476 S-Code -	• Change hydraulic cylinder exit side guide no.1 at Welder.	Plan				Manpower Requester	Surachet, Weerayut,Chattawan					• Lifting operation machine - Lifting No. 4697-2P			
		• Cause: Improvement project.		Actual				Initiation Source	Kwanpracha Work Permit No. 4698							
3	W/O T13155603 S-Code -	• Change top/bottom Abrasive brush roll no.1, 3.	Plan				Manpower Requester	Tipakorn,Kritsada,Nutthawit,Chattawan					• Lifting operation machine - Lifting No. 4691-2P			
		• Cause: Roll diameter has minimum.		Actual				Initiation Source	Kwanpracha Work Permit No. 4691/4692							
4	W/O T13155433 S-Code -	• Repairing air leakage at Entry section.	Plan				Manpower Requester	Kritsada, Surachet, Weerayut					• Lifting operation machine - Lifting No. 4694-2P			
		• Cause: Improvement project.		Actual				Initiation Source	Kwanpracha Work Permit No. 4694/4695							
5	W/O T13155426 S-Code -	• Change gasket flange solution at Pre-cleaning.	Plan				Manpower Requester	Jirina,Chattawan,Montian and Pitsanu					• Lifting operation machine - Lifting No. 4699-2P			
		• Cause: Improvement project.		Actual				Initiation Source	Khanakorn Work Permit No. 4699							
Section : Center-2																
No.	Facility	Work Detail	Schedule Date				Manpower Used & Initiation Source				Safety Measures				Group with Inmate	
			1	2	3	4										
6	W/O T13155453 S-Code -	• Change Hi-buffer stopper balance weight at MLT. [WS,DS]	Plan				Manpower Requester	Surachet, Weerayut					• Lifting operation machine - Lifting No. 4696-2P			
		• Cause: Found Hi-buffer damaged.		Actual				Initiation Source	Kwanpracha Work Permit No. 4696							
7	W/O T13155820 S-Code -	• Install ventilation fan blower at SPM celler.	Plan				Manpower Requester	Supplier (Well Engineering)					• Lifting operation machine - Lifting No. 4700-2P			
		• Cause: Repair shaft broken.		Actual				Initiation Source	Prasak Work Permit No. 4700							
8		W/O T13157779 S-Code -	• Take out Pot roll frame no. PTCS 1-2.	Plan				Manpower Requester	Khanakorn,Montian,Pitsanu,Jirina and Chattawan					• Lifting operation machine - Lifting No. 1518-2P		
	• Cause: Ptd Plan.		Actual					Initiation Source	Khanakorn Work Permit No. 1518							
9	W/O T13157781 S-Code -	• Inspection and test Air knife with PD.	Plan				Manpower Requester	Jirina,Chattawan,Montian and Pitsanu					• Lifting operation machine - Lifting No. 1521-2P			
		• Cause: Exchange air knife		Actual				Initiation Source	Khanakorn Work Permit No. 1521							
10	W/O T13157782 S-Code -	• Install Pot roll frame no.PTCS 1-5.	Plan				Manpower Requester	Khanakorn,Montian,Pitsanu,Jirina and Chattawan					• Lifting operation machine - Lifting No. 1930-2P			
		• Cause: Ptd Plan.		Actual				Initiation Source	Khanakorn Work Permit No. 1930							
Section : Delivery																
No.	Facility	Work Detail	Schedule Date				Manpower Used & Initiation Source				Safety Measures				Group with Inmate	
			1	2	3	4										
11	W/O T131579673 S-Code -	• Change linear guide bearing at Banding machine.	Plan				Manpower Requester	Tipakorn,Kritsada,Nutthawit,Chattawan					• Lifting operation machine - Lifting No. 5151-2P			
		• Cause: Found liner guide and bearing damage		Actual				Initiation Source	Kwanpracha Work Permit No. 5151							
							Q4612187-1 Set									
Section : Sink Roll																
No.	Facility	Work Detail	Schedule Date				Manpower Used & Initiation Source				Safety Measures				Group with Inmate	
			1	2	3	4										
12	W/O T13157779 S-Code -	• Take out Pot roll frame no. PTCS 1-2.	Plan				Manpower Requester	Khanakorn,Montian,Pitsanu,Jirina and Chattawan					• Lifting operation machine - Lifting No. 1518-2P			
		• Cause: Ptd Plan.		Actual				Initiation Source	Khanakorn Work Permit No. 1518							
13	W/O T13157781 S-Code -	• Inspection and test Air knife with PD.	Plan				Manpower Requester	Jirina,Chattawan,Montian and Pitsanu					• Lifting operation machine - Lifting No. 1521-2P			
		• Cause: Exchange air knife		Actual				Initiation Source	Khanakorn Work Permit No. 1521							
14	W/O T13157782 S-Code -	• Install Pot roll frame no.PTCS 1-5.	Plan				Manpower Requester	Khanakorn,Montian,Pitsanu,Jirina and Chattawan					• Lifting operation machine - Lifting No. 1930-2P			
		• Cause: Ptd Plan.		Actual				Initiation Source	Khanakorn Work Permit No. 1930							
15	W/O T131579673 S-Code -	• Change linear guide bearing at Banding machine.	Plan				Manpower Requester	Tipakorn,Kritsada,Nutthawit,Chattawan					• Lifting operation machine - Lifting No. 5151-2P			
		• Cause: Found liner guide and bearing damage		Actual				Initiation Source	Kwanpracha Work Permit No. 5151							
							Q4612187-1 Set									
16	W/O T13157779 S-Code -	• Take out Pot roll frame no. PTCS 1-2.	Plan				Manpower Requester	Khanakorn,Montian,Pitsanu,Jirina and Chattawan					• Lifting operation machine - Lifting No. 1518-2P			
		• Cause: Ptd Plan.		Actual				Initiation Source	Khanakorn Work Permit No. 1518							
17	W/O T13157781 S-Code -	• Inspection and test Air knife with PD.	Plan				Manpower Requester	Jirina,Chattawan,Montian and Pitsanu					• Lifting operation machine - Lifting No. 1521-2P			
		• Cause: Exchange air knife		Actual				Initiation Source	Khanakorn Work Permit No. 1521							
18	W/O T13157782 S-Code -	• Install Pot roll frame no.PTCS 1-5.	Plan				Manpower Requester	Khanakorn,Montian,Pitsanu,Jirina and Chattawan					• Lifting operation machine - Lifting No. 1930-2P			
		• Cause: Ptd Plan.		Actual				Initiation Source	Khanakorn Work Permit No. 1930							
19	W/O T131579673 S-Code -	• Change linear guide bearing at Banding machine.	Plan				Manpower Requester	Tipakorn,Kritsada,Nutthawit,Chattawan					• Lifting operation machine - Lifting No. 5151-2P			
		• Cause: Found liner guide and bearing damage		Actual				Initiation Source	Kwanpracha Work Permit No. 5151							
							Q4612187-1 Set									
20	W/O T13157779 S-Code -	• Take out Pot roll frame no. PTCS 1-2.	Plan				Manpower Requester	Khanakorn,Montian,Pitsanu,Jirina and Chattawan					• Lifting operation machine - Lifting No. 1518-2P			
		• Cause: Ptd Plan.		Actual				Initiation Source	Khanakorn Work Permit No. 1518							
21	W/O T13157781 S-Code -	• Inspection and test Air knife with PD.	Plan				Manpower Requester	Jirina,Chattawan,Montian and Pitsanu					• Lifting operation machine - Lifting No. 1521-2P			
		• Cause: Exchange air knife		Actual				Initiation Source	Khanakorn Work Permit No. 1521							
22	W/O T13157782 S-Code -	• Install Pot roll frame no.PTCS 1-5.	Plan				Manpower Requester	Khanakorn,Montian,Pitsanu,Jirina and Chattawan					• Lifting operation machine - Lifting No. 1930-2P			
		• Cause: Ptd Plan.		Actual				Initiation Source	Khanakorn Work Permit No. 1930							
23	W/O T131579673 S-Code -	• Change linear guide bearing at Banding machine.	Plan				Manpower Requester	Tipakorn,Kritsada,Nutthawit,Chattawan					• Lifting operation machine - Lifting No. 5151-2P			
		• Cause: Found liner guide and bearing damage		Actual				Initiation Source	Kwanpracha Work Permit No. 5151							
							Q4612187-1 Set									
24	W/O T13157779 S-Code -	• Take out Pot roll frame no. PTCS 1-2.	Plan				Manpower Requester	Khanakorn,Montian,Pitsanu,Jirina and Chattawan					• Lifting operation machine - Lifting No. 1518-2P			
		• Cause: Ptd Plan.		Actual				Initiation Source	Khanakorn Work Permit No. 1518							
25	W/O T13157781 S-Code -	• Inspection and test Air knife with PD.	Plan				Manpower Requester	Jirina,Chattawan,Montian and Pitsanu					• Lifting operation machine - Lifting No. 1521-2P			
		• Cause: Exchange air knife		Actual				Initiation Source	Khanakorn Work Permit No. 1521							
26	W/O T13157782 S-Code -	• Install Pot roll frame no.PTCS 1-5.	Plan				Manpower Requester	Khanakorn,Montian,Pitsanu,Jirina and Chattawan					• Lifting operation machine - Lifting No. 1930-2P			
		• Cause: Ptd Plan.		Actual				Initiation Source	Khanakorn Work Permit No. 1930							
27	W/O T131579673 S-Code -	• Change linear guide bearing at Banding machine.	Plan				Manpower Requester	Tipakorn,Kritsada,Nutthawit,Chattawan					• Lifting operation machine - Lifting No. 5151-2P			
		• Cause: Found liner guide and bearing damage		Actual				Initiation Source	Kwanpracha Work Permit No. 5151							
							Q4612187-1 Set									
28	W/O T13157779 S-Code -	• Take out Pot roll frame no. PTCS 1-2.	Plan				Manpower Requester	Khanakorn,Montian,Pitsanu,Jirina and Chattawan					• Lifting operation machine - Lifting No. 1518-2P			
		• Cause: Ptd Plan.		Actual				Initiation Source	Khanakorn Work Permit No. 1518							
29	W/O T13157781 S-Code -	• Inspection and test Air knife with PD.	Plan				Manpower Requester	Jirina,Chattawan,Montian and Pitsanu					• Lifting operation machine - Lifting No. 1521-2P			
		• Cause: Exchange air knife		Actual				Initiation Source	Khanakorn Work Permit No. 1521							
30	W/O T13157782 S-Code -	• Install Pot roll frame no.PTCS 1-5.	Plan				Manpower Requester	Khanakorn,Montian,Pitsanu,Jirina and Chattawan					• Lifting operation machine - Lifting No. 1930-2P			
		• Cause: Ptd Plan.		Actual				Initiation Source	Khanakorn Work Permit No. 1930							
31	W/O T131579673 S-Code -	• Change linear guide bearing at Banding machine.	Plan				Manpower Requester	Tipakorn,Kritsada,Nutthawit,Chattawan					• Lifting operation machine - Lifting No. 5151-2P			
		• Cause: Found liner guide and bearing damage		Actual				Initiation Source	Kwanpracha Work Permit No. 5151							
							Q4612187-1 Set									
32	W/O T13157779 S-Code -	• Take out Pot roll frame no. PTCS 1-2.	Plan				Manpower Requester	Khanakorn,Montian,Pitsanu,Jirina and Chattawan					• Lifting operation machine - Lifting No. 1518-2P			
		• Cause: Ptd Plan.		Actual				Initiation Source	Khanakorn Work Permit No. 1518							
33	W/O T13157781 S-Code -	• Inspection and test Air knife with PD.	Plan				Manpower Requester	Jirina,Chattawan,Montian and Pitsanu					• Lifting operation machine - Lifting No. 1521-2P			
		• Cause: Exchange air knife		Actual				Initiation Source	Khanakorn Work Permit No. 1521							
34	W/O T13157782 S-Code -	• Install Pot roll frame no.PTCS 1-5.	Plan				Manpower Requester	Khanakorn,Montian,Pitsanu,Jirina and Chattawan					• Lifting operation machine - Lifting No. 1930-2P			
		• Cause: Ptd Plan.		Actual				Initiation Source	Khanakorn Work Permit No. 1930							
35	W/O T131579673 S-Code -	• Change linear guide bearing at Banding machine.	Plan				Manpower Requester	Tipakorn,Kritsada,Nutthawit,Chattawan					• Lifting operation machine - Lifting No. 5151-2P			
		• Cause: Found liner guide and bearing damage		Actual				Initiation Source	Kwanpracha Work Permit No. 5151							
							Q4612187-1 Set									
36	W/O T13157779 S-Code -	• Take out Pot roll frame no. PTCS 1-2.	Plan				Manpower Requester	Khanakorn,Montian,Pitsanu,Jirina and Chattawan					• Lifting operation machine - Lifting No. 1518-2P			
		• Cause: Ptd Plan.		Actual				Initiation Source	Khanakorn Work Permit No. 1518							
37	W/O T13157781 S-Code -	• Inspection and test Air knife with PD.	Plan				Manpower Requester	Jirina,Chattawan,Montian and Pitsanu					• Lifting operation machine - Lifting No. 1521-2P			
		• Cause: Exchange air knife		Actual				Initiation Source	Khanakorn Work Permit No. 1521							
38	W/O T13157782 S-Code -	• Install Pot roll frame no.PTCS 1-5.	Plan				Manpower Requester	Khanakorn,Montian,Pitsanu,Jirina and Chattawan					• Lifting operation machine - Lifting No. 1930-2P			
		• Cause: Ptd Plan.		Actual				Initiation Source	Khanakorn Work Permit No. 1930							
39	W/O T131579673 S-Code -	• Change linear guide bearing at Banding machine.	Plan				Manpower Requester	Tipakorn,Kritsada,Nutthawit,Chattawan					• Lifting operation machine - Lifting No. 5151-2P			
		• Cause: Found liner guide and bearing damage		Actual				Initiation Source	Kwanpracha Work Permit No. 5151							
							Q4612187-1 Set									
40	W/O T13157779 S-Code -	• Take out Pot roll frame no. PTCS 1-2.	Plan				Manpower Requester	Khanakorn,Montian,Pitsanu,Jirina and Chattawan					• Lifting operation machine - Lifting No. 1518-2P			
		• Cause: Ptd Plan.		Actual				Initiation Source	Khanakorn Work Permit No. 1518							
41	W/O T13157781 S-Code -	• Inspection and test Air knife with PD.	Plan				Manpower Requester	Jirina,Chattawan,Montian and Pitsanu					• Lifting operation machine - Lifting No. 1521-2P			
		• Cause: Exchange air knife		Actual				Initiation Source	Khanakorn Work Permit No. 1521							
42	W/O T13157782 S-Code -	• Install Pot roll frame no.PTCS 1-5.	Plan				Manpower Requester	Khanakorn,Montian,Pitsanu,Jirina and Chattawan					• Lifting operation machine - Lifting No. 1930-2P			
		• Cause: Ptd Plan.		Actual				Initiation Source	Khanakorn Work Permit No. 1930							
43	W/O T131579673 S-Code -	• Change linear guide bearing at Banding machine.	Plan				Manpower Requester	Tipakorn,Kritsada,Nutthawit,Chattawan					• Lifting operation machine - Lifting No. 5151-2P			
		• Cause: Found liner guide and bearing damage		Actual				Initiation Source	Kwanpracha Work Permit No. 5151							
							Q4612187-1 Set									

Outsourced Contract Maintenance/Repairing Schedule Result

Summary Remarks Item

Cancel Item :
Reason :
Counter measure :
Present situation :
Decision : ☐ O.K. ☐ Not O.K.
Remark : If decision of maintenance general manager is not O.K., that mean can't start production line.

Section : Entry																
No.	Facility	Work Detail		Schedule Date				Manpower Used & Initiation Source								
				July												
				1	2	3	4			S	A	1	B	2	C	
1	Alkali Brush Unit 1	• Change top Alkali brush roll no 1-2.	Plan					Manpower Requester	Tanaseki Aekikawati	S		A <td>1<td>B<td>2<td>C</td></td></td></td>	1 <td>B<td>2<td>C</td></td></td>	B <td>2<td>C</td></td>	2 <td>C</td>	C
	W/O 113151400 S-Code 50287731	Cause: Roll diameter has minimum.	Actual					Initiation Source								
2	Alkali Brush Unit 1	• Change bottom Alkali brush roll no 1-3.	Plan					Manpower Requester	Tanaseki Aekikawati	S		A <td>1<td>B<td>2<td>C</td></td></td></td>	1 <td>B<td>2<td>C</td></td></td>	B <td>2<td>C</td></td>	2 <td>C</td>	C
	W/O 113151400 S-Code 50287731	Cause: Roll diameter has minimum.	Actual					Initiation Source								
3	Alkali Brush Unit 2	• Change bottom Alkali brush roll no 2-1.	Plan					Manpower Requester	Tanaseki Aekikawati	S		A <td>1<td>B<td>2<td>C</td></td></td></td>	1 <td>B<td>2<td>C</td></td></td>	B <td>2<td>C</td></td>	2 <td>C</td>	C
	W/O 1131515382 S-Code 50287731	Cause: Roll diameter has minimum.	Actual					Initiation Source								
4	Alkali Brush Unit 2	• Change top Alkali brush roll no 2-2.	Plan					Manpower Requester	Tanaseki Aekikawati	S		A <td>1<td>B<td>2<td>C</td></td></td></td>	1 <td>B<td>2<td>C</td></td></td>	B <td>2<td>C</td></td>	2 <td>C</td>	C
	W/O 113151400 S-Code 50287731	Cause: Roll diameter has minimum.	Actual					Initiation Source								
5	Alkali Brush Unit 1,2	• Charging a new bearing at Alkali brush unit 1,2.	Plan					Manpower Requester	Tanaseki Suryachand	S		A <td>1<td>B<td>2<td>C</td></td></td></td>	1 <td>B<td>2<td>C</td></td></td>	B <td>2<td>C</td></td>	2 <td>C</td>	C
	W/O 1131510981 S-Code 50281599	Cause: Found it noise sounds bearing.	Actual					Initiation Source								
6	ECT Circulation Tank.	• Change rubber bellow at ECT circulation tank.	Plan					Manpower Requester	Tanaseki Suryachand	S		A <td>1<td>B<td>2<td>C</td></td></td></td>	1 <td>B<td>2<td>C</td></td></td>	B <td>2<td>C</td></td>	2 <td>C</td>	C
	W/O 1131516087 S-Code 50234903	Cause: Found rubber bellow damaged.	Actual					Initiation Source								
7	Hot Air Dryer No.1	• Change bellow expansion joint at Hot air dryer no.1.	Plan					Manpower Requester	Tanaseki Suryachand	S		A <td>1<td>B<td>2<td>C</td></td></td></td>	1 <td>B<td>2<td>C</td></td></td>	B <td>2<td>C</td></td>	2 <td>C</td>	C
	W/O 1131184903 S-Code 50239926	Cause: Found bellow expansion joint deteriorated.	Actual					Initiation Source								

Section : Center 1															
No	Facility	Work Detail	Schedule Date				Manpower Used & Initiation Source								
			July												
				1	2	3	4								
8	Water Quench	• Repairing shaft damper at Water quench bag filter.	Plan					Manpower Requester	Tanaseki	S	A	1	B	2	C
	W/O 113151400 S-Code 50287731 Cause: Found shaft damper water leakage.	Actual						Initiation Source	Sunshard	Work Permit No.	3016				
9	Furnace	• Change oil seal and gasket at Hearth roll no.25 (US)	Plan					Manpower Requester	Tanaseki	S	A	1	B	2	C
	W/O 113151400 S-Code 50287731 Cause: Found oil seal leakage.	Actual						Initiation Source	Sunshard	Work Permit No.	3018				
10	Pot Lifting	• Re-bolting base bolt cylinder locking pin at Pot lifting	Plan					Manpower Requester	Tanaseki	S	A	1	B	2	C
	W/O 113151400 S-Code 50287731 Cause: Found loose base bolt.	Actual						Initiation Source	Sunshard	Work Permit No.	3017				
11	Pot Lifting	• Repairing hydraulic pipe line leakage at Pot lifting.	Plan					Manpower Requester	Tanaseki	S	A	1	B	2	C
	W/O 113151400 S-Code 50287731 Cause: Found hydraulic oil leakage.	Actual						Initiation Source	Sunshard	Work Permit No.	3018				

Section : Center-2															
No.	Facility	Work Detail	Schedule Date				Manpower Used & Initiation Source								
			July												
			1	2	3	4									
12	Roll Coater No.1,2	Change top/bottom Applicator roll no.1,2.	Plan				Manpower Requester	Phayut	S	A	1	B	2	C	
	W/O 113151400		Actual				Initiation Source	Phayut	Work Permit No.	3020/3021					
	S-Code 50287731	Cause: Roll period change.													
13	SPM Winger Roll	Change top/bottom SPM Winger roll no.2.	Plan				Manpower Requester	Phayut	S	A	1	B	2	C	
	W/O 113151400		Actual				Initiation Source	Phayut	Work Permit No.	3022					
	S-Code 50287732	Cause: Roll Surface damaged.													
14	CR-free	Repairing circulator pump no.2 at CR-free.	Plan				Manpower Requester	Phayut	S	A	1	B	2	C	
	W/O 113151546		Actual				Initiation Source	Phayut	Work Permit No.	3023					
	S-Code 30203104	Cause: Found circulator pump leakage.													
15	SPM HP Strip Cleaning	Repairing oil cup at SPM roll cleaning pump no.3.	Plan				Manpower Requester	Phayut	S	A	1	B	2	C	
	W/O 113151550		Actual				Initiation Source	Phayut	Work Permit No.	3024					
	S-Code 50213495	Cause: Found oil cup leakage.													
16	SPM HP Strip Cleaning	Repairing actuator control valve at SPM HP strip cleaning.	Plan				Manpower Requester	Phayut	S	A	1	B	2	C	
	W/O 113151302		Actual				Initiation Source	Phayut	Work Permit No.	3025					
	S-Code 50213380	Cause: Found actuator can't open/close.													

No.	Facility	Work Detail		Schedule Date				Manpower Used & Initiation Source								
				July												
				1	2	3	4	Manpower	Phayut	S	A	1	B	2	C	
17	SPM Water CR Tank	Cleaning heat exchanger at SPM water CR tank.	Plan					Manpower	Phayut	S	A	1 <td>B</td> <td>2<td>C</td></td>	B	2 <td>C</td>	C	
	W/O 113151400 S-Code 50283367	Cause: Found water temperature abnormal.	Actual					Requester	Phayut	Work Permit No. 3026						
18	Roll Coater No.2	Change ball joint at Applicator roll no.2.	Plan					Manpower	Phayut	S	A	1 <td>B</td> <td>2<td>C</td></td>	B	2 <td>C</td>	C	
	W/O 113151735 S-Code 50283368	Cause: Found ball joint damaged.	Actual					Requester	Phayut	Work Permit No. 3027						
19	CFC No.8	Change hydraulic cylinder at Hydraulic CFC no.8.	Plan					Manpower	Phayut	S	A	1 <td>B</td> <td>2<td>C</td></td>	B	2 <td>C</td>	C	
	W/O 113160430 S-Code 50124448	Cause: Found hydraulic oil leakage.	Actual					Requester	Phayut	Work Permit No. 3153						
Section - Delivery																
No.	Facility	Work Detail		Schedule Date				Manpower Used & Initiation Source								
				July												
				1	2	3	4	Manpower	Kemptha <td>S</td> <td>A</td> <td>1</td>	S	A	1	B	2 <td>C</td>	C	
20	Sample Car	Adjust roll alignment at Sample car.	Plan					Manpower	Kemptha	S	A	1 <td>B</td> <td>2<td>C</td></td>	B	2 <td>C</td>	C	
	W/O 113151740 S-Code 50283369	Cause: Found roll misalignment.	Actual					Requester	Kemptha	Work Permit No. 3028						
21	TR No.1	Change hydraulic cylinder bottom scrubber roll at TR no.1.	Plan					Manpower	Kemptha	S	A	1 <td>B</td> <td>2<td>C</td></td>	B	2 <td>C</td>	C	
	W/O 113151744 S-Code 50127021	Cause: Hydraulic cylinder oil leakage.	Actual					Requester	Kemptha	Work Permit No. 3029						
22	Hydraulic CFC No.11	Change hydraulic cylinder at Hydraulic CFC no.11.	Plan					Manpower	Kemptha	S	A	1 <td>B</td> <td>2<td>C</td></td>	B	2 <td>C</td>	C	
	W/O 113257620 S-Code 50124469	Cause: Hydraulic cylinder oil leakage.	Actual					Requester	Kemptha	Work Permit No. 3030						
23	Flying Cut Shear	Change bottom exit shear finish roll at Flying cut shear.	Plan					Manpower	Kemptha	S	A	1 <td>B</td> <td>2<td>C</td></td>	B	2 <td>C</td>	C	
	W/O 113151820 S-Code 50007615	Cause: Roll surface damaged.	Actual					Requester	Kemptha	Work Permit No. 4837						
24	DIT	Inspection sling wire rope condition at DIT.	Plan					Manpower	Kemptha	S	A	1 <td>B</td> <td>2<td>C</td></td>	B	2 <td>C</td>	C	
	W/O 111151742 S-Code 50206053	Cause: PM Major Failure.	Actual					Requester	Kemptha	Work Permit No. 3032						
25	TR No.2	Change nipple grease mandrel used at TR no.2.	Plan					Manpower	Kemptha	S	A	1 <td>B</td> <td>2<td>C</td></td>	B	2 <td>C</td>	C	
	W/O 113257645 S-Code 50239311	Cause: Found nipple grease leaking.	Actual					Requester	Kemptha	Work Permit No. 3033						
26	TR No.2	Change hydraulic roller cylinder frame swing at TR no.2.	Plan					Manpower	Kemptha	S	A	1 <td>B</td> <td>2<td>C</td></td>	B	2 <td>C</td>	C	
	W/O 113151771 S-Code 50239327	Cause: Hydraulic cylinder oil leakage.	Actual					Requester	Kemptha	Work Permit No. 3034						
27	TR Coil Car, Walking Beam	Measure length of hydraulic hose at TR Coil Car, Walking beam.	Plan					Manpower	Kemptha	S	A	1 <td>B</td> <td>2<td>C</td></td>	B	2 <td>C</td>	C	
	W/O 113151879 S-Code 50133314	Cause: For ordering hydraulic hoses or spare parts.	Actual					Requester	Kemptha	Work Permit No. 8235						

ภาคผนวก ข.2-6

หนังสือรับแจ้งการมีบุคลากรด้านสิ่งแวดล้อมประจำโรงงาน

ที่ ออก ๐๓๑๓/ ๕๕๕ ๘



กรมโรงงานอุตสาหกรรม
ถนนพระรามที่ ๖ แขวงทุ่งพญาไท
เขตราชเทวี กรุงเทพฯ ๑๐๕๐๐

๒๐ มีนาคม ๒๕๖๖

เรื่อง หนังสือรับแจ้งการมีบุคลากรด้านสิ่งแวดล้อมประจำโรงงาน

เรียน ผู้รับใบอนุญาตประกอบกิจการโรงงาน บริษัท โพลโค โค้ทเต็ด สตีล (ประเทศไทย) จำกัด

อ้างถึง คำขอเลขที่ ๐๓๔๓ ลงรับวันที่ ๑๕ มีนาคม ๒๕๖๖

ตามคำขอที่อ้างถึง ท่านแจ้งการมีบุคลากรด้านสิ่งแวดล้อมประจำโรงงาน ของ
บริษัท โพลโค โค้ทเต็ด สตีล (ประเทศไทย) จำกัด ทะเบียนผู้ประกอบการอุตสาหกรรมเลขที่ ๘๒๒๕๐๙๐๐๑๒๕๕๗๘
(น.๕๙-๑/๒๕๕๗-นอต.) ประกอบกิจการผลิตเหล็กกล้าชุบในซ์ (Galvanized Steel) ตั้งอยู่ ณ เลขที่ ๗/๔๔๘
หมู่ที่ ๖ นิคมอุตสาหกรรมอมตะซิตี้ ระยอง ตำบลมาบตาพุด อำเภอปลวกแดง จังหวัดระยอง โทรศัพท์
๐ ๓๘๖๒ ๗๒๔๑

กรมโรงงานอุตสาหกรรมพิจารณาแล้ว รับแจ้งการให้บุคลากรด้านสิ่งแวดล้อมประจำโรงงาน
และให้ท่านยื่นคำขอแจ้งการมีบุคลากรด้านสิ่งแวดล้อมประจำโรงงานครั้งต่อไป ภายในวันที่ ๑๖ มีนาคม ๒๕๖๙
โดยมีบุคลากรด้านสิ่งแวดล้อมประจำโรงงาน ดังนี้

ผู้จัดการสิ่งแวดล้อม			นายเฉลิมพล เทวัน		
ลำดับ	ผู้ควบคุมระบบบำบัด	เลขทะเบียน	มลพิษน้ำ	มลพิษอากาศ	มลพิษกากอุตสาหกรรม
๑			✓		✓
๒			✓	✓	✓
ลำดับ	ผู้ปฏิบัติงานประจำระบบบำบัด		มลพิษน้ำ	มลพิษอากาศ	มลพิษกากอุตสาหกรรม
๑			✓		
๒				✓	
๓				✓	
๔			✓		
๕				✓	

ลำดับ ๗...

ลำดับ	ผู้ปฏิบัติงานประจำระบบบำบัด	มลพิษน้ำ	มลพิษอากาศ	มลพิษกากอุตสาหกรรม
๖		✓		
๗				✓

หมายเหตุ ๑. การแจ้งการมี/ยกเลิก/เพิ่มเติม/เปลี่ยนแปลง บุคลากรด้านสิ่งแวดล้อมประจำโรงงาน ต้องส่งหนังสือฉบับนี้ด้วย
๒. ยกเลิกหนังสือรับแจ้งการมีบุคลากรด้านสิ่งแวดล้อมประจำโรงงาน ที่ ยก ๐๓๑๗/๑๐๒๕๐ ลงวันที่ ๑๑ กันยายน ๒๕๖๓
จึงเรียนมาเพื่อโปรดทราบ

ขอแสดงความนับถือ



ผู้อำนวยการกองส่งเสริมเทคโนโลยีสิ่งแวดล้อมโรงงาน
ปฏิบัติราชการแทนอธิบดีกรมโรงงานอุตสาหกรรม

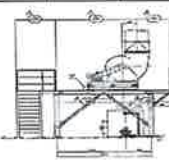
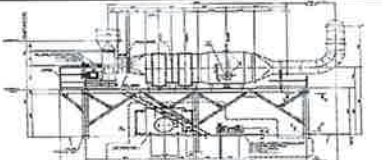
กองส่งเสริมเทคโนโลยีสิ่งแวดล้อมโรงงาน
กลุ่มกำกับบุคลากรด้านสิ่งแวดล้อมประจำโรงงาน
โทรศัพท์ ๐ ๒๔๓๐ ๖๓๑๕ ต่อ ๒๔๐๕
โทรสาร ๐ ๒๔๓๐ ๖๓๑๕ ต่อ ๒๔๙๙
ไปรษณีย์อิเล็กทรอนิกส์ saraban@dew.mail.go.th



ภาคผนวก ข.2-7

เอกสารตรวจสอบประสิทธิภาพระบบระบายอากาศ

Item No.	Equipment	posco TCS	POSCO CGL ENTRY FUME SCRUBBER	Date: 15/01/25
5.5.4				Rev No. Page: 1/2

FAN SPECIFICATION			
CAPACITY	703 CMH	REVOLUTION	1400 RPM
POWER	200 mmHg	TEMP.	50°C (MAX)
PUMP SPECIFICATION			
CAPACITY	0.8 CMH	REVOLUTION	1700 RPM
FLUID	20mm	NOZZLES	SS304
MOTOR			
5.5KW 4P 3P 50Hz 300V AC MOTOR			

* CHECK ITEMS AND MEASUREMENT VALUE							
No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range Min/OK Max/NG	Result
1	Scrubber unit	Blower	Vibration	Vibration Meter	Once/week	0 mm/s 5.5 mm/s	2.50 mm/s
2			Temperature of bearing	Temperature gun	Once/week	35 °C 65 °C	49 °C
3			No abnormal sound	Sound rod	Once/week	0 X	0
4		V-belt	Grease status	Visually	Once/week	0 X	0
5			No abnormal sound	Sound rod	Once/week	0 X	0
6			Tension in belt	Visually	Once/week	0 X	0
7		Manual damper	Normal rotation	Visually/Rotate	Once/week	0 X	0
8		Soft canvas	Condition/leakage	Visually	Once/week	0 X	0
9		Mist eliminator	Demister	Visually/Clogged	Once/month	0 X	0
10		Scrubber	Spray nozzle	Visually/Clogged	Once/month	0 X	0
11			Water leakage	Visually	Once/week	0 X	0
12			Flange leakage	Visually	Once/week	0 X	0
13		Fume washer tank	Valve leakage	Visually	Once/week	0 X	0
14			Water level	Visually	Once/week	60% 80%	60 %
15		Fume circ' pump	Vibration	Vibration Meter	Once/week	0 mm/s 5.5 mm/s	1.61 mm/s
16	Hot dlo tank	Bellows 200A	No abnormal sound	Sound rod	Once/week	0 X	0
17			Bellows condition	Visually	Once/week	0 X	0
18			Damper condition	Visually	Once/week	0 X	0
19		Damper 200A	Fume leakage	Visually	Once/week	0 X	0
20			Normal rotation	Visually/Rotate	Once/week	0 X	0
21			Fume leakage	Visually	Once/week	0 X	0
22	Alkali mixing tank NaOH 3 - 5% 25m³	Bellows 200A	Flange leakage	Visually	Once/week	0 X	0
23			Bellows condition	Visually	Once/week	0 X	0
24			Damper condition	Visually	Once/week	0 X	0
25		Damper 200A	Fume leakage	Visually	Once/week	0 X	0
26			Normal rotation	Visually/Rotate	Once/week	0 X	0
27			Fume leakage	Visually	Once/week	0 X	0
28	No.1 Alkali brush tank	Pipe 200A	Flange leakage	Visually	Once/week	0 X	0
29			Bellows condition	Visually	Once/week	0 X	0
30			Damper condition	Visually	Once/week	0 X	0
31		Damper 200A	Fume leakage	Visually	Once/week	0 X	0
32			Normal rotation	Visually/Rotate	Once/week	0 X	0
33			Fume leakage	Visually	Once/week	0 X	0
34	Alkali circulation tank NaOH 3 - 5% 25m³	Bellows 200A	Flange leakage	Visually	Once/week	0 X	0
35			Bellows condition	Visually	Once/week	0 X	0
36			Damper condition	Visually	Once/week	0 X	0
37		Damper 200A	Fume leakage	Visually	Once/week	0 X	0
38			Normal rotation	Visually/Rotate	Once/week	0 X	0
39			Fume leakage	Visually	Once/week	0 X	0
40	No.11,12 Wringer roll Unit	Pipe 200A	Flange leakage	Visually	Once/week	0 X	0
41			Bellows condition	Visually	Once/week	0 X	0
42			Damper condition	Visually	Once/week	0 X	0
43		Damper 200A	Fume leakage	Visually	Once/week	0 X	0
44			Normal rotation	Visually/Rotate	Once/week	0 X	0
45			Fume leakage	Visually	Once/week	0 X	0
46	Electrolytic Cleaning Unit	Pipe 200A	Flange leakage	Visually	Once/week	0 X	0
47			Bellows condition	Visually	Once/week	0 X	0
48			Damper condition	Visually	Once/week	0 X	0
49		Damper 200A	Fume leakage	Visually	Once/week	0 X	0
50			Normal rotation	Visually/Rotate	Once/week	0 X	0
51			Fume leakage	Visually	Once/week	0 X	0
52	No.21,22 Wringer roll Unit	Bellows 200A	Flange leakage	Visually	Once/week	0 X	0
53			Bellows condition	Visually	Once/week	0 X	0
54			Damper condition	Visually	Once/week	0 X	0
55		Damper 200A	Fume leakage	Visually	Once/week	0 X	0
56			Normal rotation	Visually/Rotate	Once/week	0 X	0
57			Fume leakage	Visually	Once/week	0 X	0
58		Pipe 200A	Flange leakage	Visually	Once/week	0 X	0

Item No.	Equipment	posco TCS	POSCO CGL ENTRY FUME SCRUBBER	Date: 15/01/25
5.5.4				Rev No. Page: 2/2

* CHECK ITEMS AND MEASUREMENT VALUE							
No.	Equipment	Control item	Management criteria	Inspect method	Meas. Cycle	Control Range Min Max	Remark
59	No.2 Alkali brush tank	Bellows 200A	Bellows condition	Visually	Once/week	0 X	0
60		Damper 200A	Damper condition	Visually	Once/week	0 X	0
61			Fume leakage	Visually	Once/week	0 X	0
62			Normal rotation	Visually/Rotate	Once/week	0 X	0
63		Pipe 200A	Fume leakage	Visually	Once/week	0 X	0
64			Flange leakage	Visually	Once/week	0 X	0
65	ECT filter tank	Bellows 200A	Bellows condition	Visually	Once/week	0 X	0
66		Damper 200A	Damper condition	Visually	Once/week	0 X	0
67			Fume leakage	Visually	Once/week	0 X	0
68			Normal rotation	Visually/Rotate	Once/week	0 X	0
69		Pipe 200A	Fume leakage	Visually	Once/week	0 X	0
70			Flange leakage	Visually	Once/week	0 X	0
71	No.23,24 Wringer roll Unit	Bellows 200A	Bellows condition	Visually	Once/week	0 X	0
72		Damper 200A	Damper condition	Visually	Once/week	0 X	0
73			Fume leakage	Visually	Once/week	0 X	0
74			Normal rotation	Visually/Rotate	Once/week	0 X	0
75		Pipe 200A	Fume leakage	Visually	Once/week	0 X	0
76			Flange leakage	Visually	Once/week	0 X	0
77	ECT circulation tank NaOH 3 - 5% 25m³	Bellows 200A	Bellows condition	Visually	Once/week	0 X	0
78		Damper 200A	Damper condition	Visually	Once/week	0 X	0
79			Fume leakage	Visually	Once/week	0 X	0
80			Normal rotation	Visually/Rotate	Once/week	0 X	0
81		Pipe 200A	Fume leakage	Visually	Once/week	0 X	0
82			Flange leakage	Visually	Once/week	0 X	0
83	Abrasive brush tank	Bellows 200A	Bellows condition	Visually	Once/week	0 X	0
84		Damper 200A	Damper condition	Visually	Once/week	0 X	0
85			Fume leakage	Visually	Once/week	0 X	0
86			Normal rotation	Visually/Rotate	Once/week	0 X	0
87		Pipe 250A	Fume leakage	Visually	Once/week	0 X	0
88			Flange leakage	Visually	Once/week	0 X	0
89	Abrasive brush circulation tank 20m³	Bellows 200A	Bellows condition	Visually	Once/week	0 X	0
90		Damper 200A	Damper condition	Visually	Once/week	0 X	0
91			Fume leakage	Visually	Once/week	0 X	0
92			Normal rotation	Visually/Rotate	Once/week	0 X	0
93		Pipe 200A	Fume leakage	Visually	Once/week	0 X	0
94			Flange leakage	Visually	Once/week	0 X	0
95	No.25,26 Wringer roll Unit	Bellows 200A	Bellows condition	Visually	Once/week	0 X	0
96		Damper 200A	Damper condition	Visually	Once/week	0 X	0
97			Fume leakage	Visually	Once/week	0 X	0
98			Normal rotation	Visually/Rotate	Once/week	0 X	0
99		Pipe 200A	Fume leakage	Visually	Once/week	0 X	0
100			Flange leakage	Visually	Once/week	0 X	0
101	Final hot rinse circulation tank 20m³	Bellows 200A	Bellows condition	Visually	Once/week	0 X	0
102		Damper 200A	Damper condition	Visually	Once/week	0 X	0
103			Fume leakage	Visually	Once/week	0 X	0
104			Normal rotation	Visually/Rotate	Once/week	0 X	0
105		Pipe 200A	Fume leakage	Visually	Once/week	0 X	0
106			Flange leakage	Visually	Once/week	0 X	0
107	Final hot rinse tank	Bellows 200A	Bellows condition	Visually	Once/week	0 X	0
108		Damper 200A	Damper condition	Visually	Once/week	0 X	0
109			Fume leakage	Visually	Once/week	0 X	0
110			Normal rotation	Visually/Rotate	Once/week	0 X	0
111		Pipe 200A	Fume leakage	Visually	Once/week	0 X	0
112			Flange leakage	Visually	Once/week	0 X	0
113	Vertical wringer roll unit	Bellows 150A	Bellows condition	Visually	Once/week	0 X	0
114		Damper 150A	Damper condition	Visually	Once/week	0 X	0
115			Fume leakage	Visually	Once/week	0 X	0
116			Normal rotation	Visually/Rotate	Once/week	0 X	0
117		Pipe 150A	Fume leakage	Visually	Once/week	0 X	0
118			Flange leakage	Visually	Once/week	0 X	0

Item No.
5.5.4

Equipment

posco

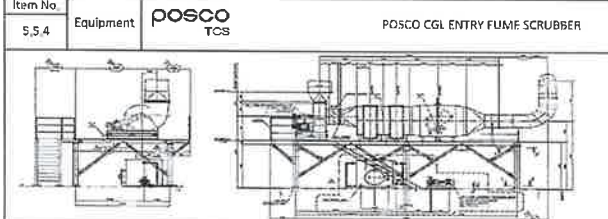
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POSCO CGL ENTRY FUME SCRUBBER

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FAN SPECIFICATION			
CAPACITY	700 CMH	REVOLUTION	1400 RPM
STATIC PRESSURE	200 mmHg	TEMP.	80°C(MAX)
MOTOR	370V 4P 3p 50Hz 300V AC MOTOR		

PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1700 RPM
HEAD	20mH	NOZZLES	EDWARDS
MOTOR	5.5KW 4P 3p 50Hz 330V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE

No.	Equipment	Control Items	Management criteria	Inspect method	Meas. Cycle	Control Range	Result
1	Scrubber unit	Blower	Vibration	Vibration Meter	Once/week	0 mm/s	2.73 mm/s
2			Temperature of bearing	Temperature gun	Once/week	95 °C	62.5
3			No abnormal sound	Sound rod	Once/week	0	0
4			Grease status	Visually	Once/week	0	0
5		V-belt	No abnormal sound	Sound rod	Once/week	0	0
6			Tension in belt	Visually	Once/week	0	0
7		Manual damper	Normal rotation	Visually/Rotate	Once/week	0	0
8			Soft canvas	Condition/leakage	Once/week	0	0
9		Mist eliminator	Demister	Visually/Clogged	Once/month	0	0
10			Spray nozzle	Visually/Clogged	Once/month	0	0
11		Fume washer tank	Water leakage	Visually	Once/week	0	0
12			Flange leakage	Visually	Once/week	0	0
13			Valve leakage	Visually	Once/week	0	0
14			Water level	Visually	Once/week	60%	80%
15	Hot dip tank	Fume cir' pump	Vibration	Vibration Meter	Once/week	0 mm/s	5.5 mm/s
16			No abnormal sound	Sound rod	Once/week	0	0
17		Bellows 200A	Bellows condition	Visually	Once/week	0	0
18			Damper condition	Visually	Once/week	0	0
19		Damper 200A	Fume leakage	Visually	Once/week	0	0
20			Normal rotation	Visually/Rotate	Once/week	0	0
21		Pipe 200A	Fume leakage	Visually	Once/week	0	0
22			Flange leakage	Visually	Once/week	0	0
23		Bellows 200A	Bellows condition	Visually	Once/week	0	0
24			Damper condition	Visually	Once/week	0	0
25	Alkali mixing tank NaOH 3 - 5% 25m³	Damper 200A	Fume leakage	Visually	Once/week	0	0
26			Normal rotation	Visually/Rotate	Once/week	0	0
27		Pipe 200A	Fume leakage	Visually	Once/week	0	0
28			Flange leakage	Visually	Once/week	0	0
29		Bellows 200A	Bellows condition	Visually	Once/week	0	0
30			Damper condition	Visually	Once/week	0	0
31		Damper 200A	Fume leakage	Visually	Once/week	0	0
32			Normal rotation	Visually/Rotate	Once/week	0	0
33		Pipe 200A	Fume leakage	Visually	Once/week	0	0
34			Flange leakage	Visually	Once/week	0	0
35		Bellows 200A	Bellows condition	Visually	Once/week	0	0
36			Damper condition	Visually	Once/week	0	0
37	Alkali circulation tank NaOH 3 - 5% 25m³	Damper 200A	Fume leakage	Visually	Once/week	0	0
38			Normal rotation	Visually/Rotate	Once/week	0	0
39		Pipe 200A	Fume leakage	Visually	Once/week	0	0
40			Flange leakage	Visually	Once/week	0	0
41		Bellows 200A	Bellows condition	Visually	Once/week	0	0
42			Damper condition	Visually	Once/week	0	0
43		Damper 200A	Fume leakage	Visually	Once/week	0	0
44			Normal rotation	Visually/Rotate	Once/week	0	0
45		Pipe 200A	Fume leakage	Visually	Once/week	0	0
46			Flange leakage	Visually	Once/week	0	0
47		Bellows 200A	Bellows condition	Visually	Once/week	0	0
48			Damper condition	Visually	Once/week	0	0
49	Electrolytic Cleaning Unit	Damper 200A	Fume leakage	Visually	Once/week	0	0
50			Normal rotation	Visually/Rotate	Once/week	0	0
51		Pipe 200A	Fume leakage	Visually	Once/week	0	0
52			Flange leakage	Visually	Once/week	0	0
53		Bellows 200A	Bellows condition	Visually	Once/week	0	0
54			Damper condition	Visually	Once/week	0	0
55		Damper 200A	Fume leakage	Visually	Once/week	0	0
56			Normal rotation	Visually/Rotate	Once/week	0	0
57		Pipe 200A	Fume leakage	Visually	Once/week	0	0
58			Flange leakage	Visually	Once/week	0	0

Item No. 5.5.4	Equipment	posco TCS	POSCO CGL ENTRY FUME SCRUBBER					Date: 10/01/24 Rev No. Page: 2/2
* CHECK ITEMS AND MEASUREMENT VALUE								
No.	Equipment	Control item	Management criteria	Inspect method	Meas. Cycle	Control Range		Remark
						Min	Max	
59	No.2 Alkali brush tank	Bellows 200A	Bellows condition	Visually	Once/week	0	X	0
60			Damper condition	Visually	Once/week	0	X	0
61		Damper 200A	Fume leakage	Visually	Once/week	0	X	0
62			Normal rotation	Visually/Rotate	Once/week	0	X	0
63		Pipe 200A	Fume leakage	Visually	Once/week	0	X	0
64			Flange leakage	Visually	Once/week	0	X	0
65		Bellows 200A	Bellows condition	Visually	Once/week	0	X	0
66			Damper condition	Visually	Once/week	0	X	0
67		Damper 200A	Fume leakage	Visually	Once/week	0	X	0
68			Normal rotation	Visually/Rotate	Once/week	0	X	0
69		Pipe 200A	Fume leakage	Visually	Once/week	0	X	0
70			Flange leakage	Visually	Once/week	0	X	0
71	No.23,24 Wringer roll Unit	Bellows 200A	Bellows condition	Visually	Once/week	0	X	0
72			Damper condition	Visually	Once/week	0	X	0
73		Damper 200A	Fume leakage	Visually	Once/week	0	X	0
74			Normal rotation	Visually/Rotate	Once/week	0	X	0
75		Pipe 200A	Fume leakage	Visually	Once/week	0	X	0
76			Flange leakage	Visually	Once/week	0	X	0
77		Bellows 200A	Bellows condition	Visually	Once/week	0	X	0
78			Damper condition	Visually	Once/week	0	X	0
79		Damper 200A	Fume leakage	Visually	Once/week	0	X	0
80			Normal rotation	Visually/Rotate	Once/week	0	X	0
81		Pipe 200A	Fume leakage	Visually	Once/week	0	X	0
82			Flange leakage	Visually	Once/week	0	X	0
83	ECT circulation tank NaOH 3 - 5% 25m³	Bellows 200A	Bellows condition	Visually	Once/week	0	X	0
84			Damper condition	Visually	Once/week	0	X	0
85		Damper 200A	Fume leakage	Visually	Once/week	0	X	0
86			Normal rotation	Visually/Rotate	Once/week	0	X	0
87		Pipe 250A	Fume leakage	Visually	Once/week	0	X	0
88			Flange leakage	Visually	Once/week	0	X	0
89		Bellows 200A	Bellows condition	Visually	Once/week	0	X	0
90			Damper condition	Visually	Once/week	0	X	0
91		Damper 200A	Fume leakage	Visually	Once/week	0	X	0
92			Normal rotation	Visually/Rotate	Once/week	0	X	0
93		Pipe 200A	Fume leakage	Visually	Once/week	0	X	0
94			Flange leakage	Visually	Once/week	0	X	0
95	No.25,26 Wringer roll Unit	Bellows 200A	Bellows condition	Visually	Once/week	0	X	0
96			Damper condition	Visually	Once/week	0	X	0
97		Damper 200A	Fume leakage	Visually	Once/week	0	X	0
98			Normal rotation	Visually/Rotate	Once/week	0	X	0
99		Pipe 200A	Fume leakage	Visually	Once/week	0	X	0
100			Flange leakage	Visually	Once/week	0	X	0
101		Bellows 200A	Bellows condition	Visually	Once/week	0	X	0
102			Damper condition	Visually	Once/week	0	X	0
103		Damper 200A	Fume leakage	Visually	Once/week	0	X	0
104			Normal rotation	Visually/Rotate	Once/week	0	X	0
105		Pipe 200A	Fume leakage	Visually	Once/week	0	X	0
106			Flange leakage	Visually	Once/week	0	X	0
107	Final hot rinse circulation tank 20m³	Bellows 200A	Bellows condition	Visually	Once/week	0	X	0
108			Damper condition	Visually	Once/week	0	X	0
109		Damper 200A	Fume leakage	Visually	Once/week	0	X	0
110			Normal rotation	Visually/Rotate	Once/week	0	X	0
111		Pipe 200A	Fume leakage	Visually	Once/week	0	X	0
112			Flange leakage	Visually	Once/week	0	X	0
113		Bellows 150A	Bellows condition	Visually	Once/week	0	X	0
114			Damper condition	Visually	Once/week	0	X	0
115		Damper 150A	Fume leakage	Visually	Once/week	0	X	0
116			Normal rotation	Visually/Rotate	Once/week	0	X	0
117		Pipe 150A	Fume leakage	Visually	Once/week	0	X	0
118			Flange leakage	Visually	Once/week	0	X	0

Item No.

5.5.4

Equipment

posco

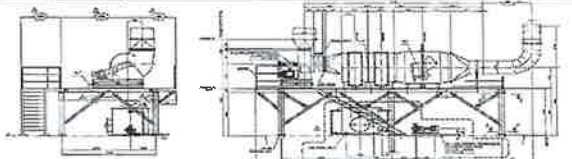
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FAN SPECIFICATION

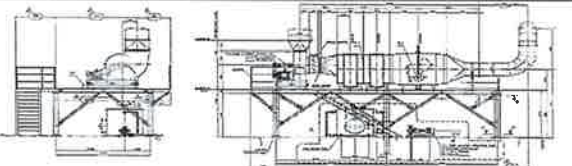
CAPACITY	700 CMH	REVOLUTION	1400 RPM
START	200 mmHg	TEMP	80°C (MAX)
MOTOR	37KW 4P 34 50HZ 262V AC MOTOR		

PUMP SPECIFICATION

CAPACITY	0.8 CMH	REVOLUTION	1700 RPM
HEAD	20mH ₂ O	NOZZLES	80MM DIA
MOTOR	5.5KW 4P 34 50HZ 262V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE							
No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range	Result
1	Scrubber unit	Blower	Vibration	Vibration Meter	Once/week	0 mm/s	0.1 mm/s
2			Temperature of bearing	Temperature gun	Once/week	35 °C	65 °C
3			No abnormal sound	Sound rod	Once/week	0	X
4		V-belt	Grease status	Visually	Once/week	0	X
5			No abnormal sound	Sound rod	Once/week	0	X
6			Tension in belt	Visually	Once/week	0	X
7		Manual damper	Normal rotation	Visually/Rotate	Once/week	0	X
8		Soft canves	Condition/leakage	Visually	Once/week	0	X
9		Mist eliminator	Demister	Visually/Clogged	Once/month	0	X
10		Scrubber	Spray nozzle	Visually/Clogged	Once/month	0	X
11		Fume washer tank	Water leakage	Visually	Once/week	0	X
12			Flange leakage	Visually	Once/week	0	X
13			Valve leakage	Visually	Once/week	0	X
14		Fume cir' pump	Water level	Visually	Once/week	60% ~ 80%	50 %
15			Vibration	Vibration Meter	Once/week	0 mm/s	0.1 mm/s
16			No abnormal sound	Sound rod	Once/week	0	X
17	Hot dip tank	Bellows 200A	Bellows condition	Visually	Once/week	0	X
18		Damper 200A	Damper condition	Visually	Once/week	0	X
19			Fume leakage	Visually	Once/week	0	X
20			Normal rotation	Visually/Rotate	Once/week	0	X
21		Pipe 200A	Fume leakage	Visually	Once/week	0	X
22			Flange leakage	Visually	Once/week	0	X
23			Normal rotation	Visually/Rotate	Once/week	0	X
24		Bellows 200A	Bellows condition	Visually	Once/week	0	X
25		Damper 200A	Damper condition	Visually	Once/week	0	X
26			Fume leakage	Visually	Once/week	0	X
27			Normal rotation	Visually/Rotate	Once/week	0	X
28	Alkali mixing tank NaOH 3 - 5% 25m ³	Pipe 200A	Fume leakage	Visually	Once/week	0	X
29			Flange leakage	Visually	Once/week	0	X
30			Normal rotation	Visually/Rotate	Once/week	0	X
31		Bellows 200A	Bellows condition	Visually	Once/week	0	X
32			Damper condition	Visually	Once/week	0	X
33			Fume leakage	Visually	Once/week	0	X
34		Pipe 200A	Fume leakage	Visually	Once/week	0	X
35			Flange leakage	Visually	Once/week	0	X
36			Normal rotation	Visually/Rotate	Once/week	0	X
37		Bellows 200A	Bellows condition	Visually	Once/week	0	X
38			Damper condition	Visually	Once/week	0	X
39			Fume leakage	Visually	Once/week	0	X
40	Alkali brush tank No.1	Damper 200A	Normal rotation	Visually/Rotate	Once/week	0	X
41			Fume leakage	Visually	Once/week	0	X
42			Flange leakage	Visually	Once/week	0	X
43		Pipe 200A	Fume leakage	Visually	Once/week	0	X
44			Flange leakage	Visually	Once/week	0	X
45			Normal rotation	Visually/Rotate	Once/week	0	X
46		Bellows 200A	Bellows condition	Visually	Once/week	0	X
47			Damper condition	Visually	Once/week	0	X
48			Fume leakage	Visually	Once/week	0	X
49		Pipe 200A	Fume leakage	Visually	Once/week	0	X
50			Flange leakage	Visually	Once/week	0	X
51			Normal rotation	Visually/Rotate	Once/week	0	X
52	Alkali circulation tank NaOH 3 - 5% 25m ³	Damper 200A	Fume leakage	Visually	Once/week	0	X
53			Flange leakage	Visually	Once/week	0	X
54			Normal rotation	Visually/Rotate	Once/week	0	X
55		Pipe 200A	Fume leakage	Visually	Once/week	0	X
56			Flange leakage	Visually	Once/week	0	X
57			Normal rotation	Visually/Rotate	Once/week	0	X
58		Bellows 200A	Bellows condition	Visually	Once/week	0	X
59			Damper condition	Visually	Once/week	0	X
60			Fume leakage	Visually	Once/week	0	X
61		Pipe 200A	Fume leakage	Visually	Once/week	0	X
62			Flange leakage	Visually	Once/week	0	X
63			Normal rotation	Visually/Rotate	Once/week	0	X
64	No.11,12 Wringer roll Unit	Damper 200A	Fume leakage	Visually	Once/week	0	X
65			Flange leakage	Visually	Once/week	0	X
66			Normal rotation	Visually/Rotate	Once/week	0	X
67		Pipe 200A	Fume leakage	Visually	Once/week	0	X
68			Flange leakage	Visually	Once/week	0	X
69			Normal rotation	Visually/Rotate	Once/week	0	X
70		Bellows 200A	Bellows condition	Visually	Once/week	0	X
71			Damper condition	Visually	Once/week	0	X
72			Fume leakage	Visually	Once/week	0	X
73		Pipe 200A	Fume leakage	Visually	Once/week	0	X
74			Flange leakage	Visually	Once/week	0	X
75			Normal rotation	Visually/Rotate	Once/week	0	X
76	Electrolytic Cleaning Unit	Damper 200A	Fume leakage	Visually	Once/week	0	X
77			Flange leakage	Visually	Once/week	0	X
78			Normal rotation	Visually/Rotate	Once/week	0	X
79		Pipe 200A	Fume leakage	Visually	Once/week	0	X
80			Flange leakage	Visually	Once/week	0	X
81			Normal rotation	Visually/Rotate	Once/week	0	X
82		Bellows 200A	Bellows condition	Visually	Once/week	0	X
83			Damper condition	Visually	Once/week	0	X
84			Fume leakage	Visually	Once/week	0	X
85		Pipe 200A	Fume leakage	Visually	Once/week	0	X
86			Flange leakage	Visually	Once/week	0	X
87			Normal rotation	Visually/Rotate	Once/week	0	X
88	No.21,22 Wringer roll Unit	Damper 200A	Fume leakage	Visually	Once/week	0	X
89			Flange leakage	Visually	Once/week	0	X
90			Normal rotation	Visually/Rotate	Once/week	0	X
91		Pipe 200A	Fume leakage	Visually	Once/week	0	X
92			Flange leakage	Visually	Once/week	0	X
93			Normal rotation	Visually/Rotate	Once/week	0	X
94		Bellows 200A	Bellows condition	Visually	Once/week	0	X
95			Damper condition	Visually	Once/week	0	X
96			Fume leakage	Visually	Once/week	0	X
97		Pipe 200A	Fume leakage	Visually	Once/week	0	X
98			Flange leakage	Visually	Once/week	0	X
99			Normal rotation	Visually/Rotate	Once/week	0	X

Item No.	Equipment	posco TCS	POSCO CGL ENTRY FUME SCRUBBER				Date: 14/05/2016	
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							Page: 2/2	
* CHECK ITEMS AND MEASUREMENT VALUE								
No.	Equipment	Control item	Management criteria	Inspect method	Meas. Cycle	Control Range		Remark
						Min	Max	
59	No.2 Alkali brush tank	Bellows 200A	Bellows condition	Visually	Once/week	0	X	0
60		Damper 200A	Damper condition	Visually	Once/week	0	X	0
61			Fume leakage	Visually	Once/week	0	X	0
62			Normal rotation	Visually/Rotate	Once/week	0	X	0
63		Pipe 200A	Fume leakage	Visually	Once/week	0	X	0
64			Flange leakage	Visually	Once/week	0	X	0
65			Normal rotation	Visually/Rotate	Once/week	0	X	0
66		Bellows 200A	Bellows condition	Visually	Once/week	0	X	0
67			Damper condition	Visually	Once/week	0	X	0
68			Fume leakage	Visually	Once/week	0	X	0
69	ECT filter tank	Damper 200A	Normal rotation	Visually/Rotate	Once/week	0	X	0
70			Fume leakage	Visually	Once/week	0	X	0
71			Flange leakage	Visually	Once/week	0	X	0
72		Pipe 200A	Bellows condition	Visually	Once/week	0	X	0
73			Damper condition	Visually	Once/week	0	X	0
74			Fume leakage	Visually	Once/week	0	X	0
75		Pipe 200A	Normal rotation	Visually/Rotate	Once/week	0	X	0
76			Fume leakage	Visually	Once/week	0	X	0
77			Flange leakage	Visually	Once/week	0	X	0
78	No.23,24 Winger roll Unit	Bellows 200A	Bellows condition	Visually	Once/week	0	X	0
79			Damper condition	Visually	Once/week	0	X	0
80			Fume leakage	Visually	Once/week	0	X	0
81		Damper 200A	Normal rotation	Visually/Rotate	Once/week	0	X	0
82			Fume leakage	Visually	Once/week	0	X	0
83			Flange leakage	Visually	Once/week	0	X	0
84		Pipe 200A	Bellows condition	Visually	Once/week	0	X	0
85			Damper condition	Visually	Once/week	0	X	0
86			Fume leakage	Visually	Once/week	0	X	0
87	ECT circulation tank NaOH 3 ~ 5% 25m³	Damper 200A	Normal rotation	Visually/Rotate	Once/week	0	X	0
88			Fume leakage	Visually	Once/week	0	X	0
89			Flange leakage	Visually	Once/week	0	X	0
90		Pipe 200A	Bellows condition	Visually	Once/week	0	X	0
91			Flange leakage	Visually	Once/week	0	X	0
92			Normal rotation	Visually/Rotate	Once/week	0	X	0
93		Bellows 200A	Bellows condition	Visually	Once/week	0	X	0
94			Damper condition	Visually	Once/week	0	X	0
95			Fume leakage	Visually	Once/week	0	X	0
96	Abrasive brush tank	Damper 200A	Normal rotation	Visually/Rotate	Once/week	0	X	0
97			Fume leakage	Visually	Once/week	0	X	0
98			Flange leakage	Visually	Once/week	0	X	0
99		Pipe 250A	Bellows condition	Visually	Once/week	0	X	0
100			Damper condition	Visually	Once/week	0	X	0
101			Fume leakage	Visually	Once/week	0	X	0
102		Bellows 200A	Bellows condition	Visually	Once/week	0	X	0
103			Damper condition	Visually	Once/week	0	X	0
104			Fume leakage	Visually	Once/week	0	X	0
105	No.25,26 Wringer roll Unit	Damper 200A	Normal rotation	Visually/Rotate	Once/week	0	X	0
106			Fume leakage	Visually	Once/week	0	X	0
107			Flange leakage	Visually	Once/week	0	X	0
108		Pipe 200A	Bellows condition	Visually	Once/week	0	X	0
109			Damper condition	Visually	Once/week	0	X	0
110			Fume leakage	Visually	Once/week	0	X	0
111		Bellows 200A	Bellows condition	Visually	Once/week	0	X	0
112			Damper condition	Visually	Once/week	0	X	0
113			Fume leakage	Visually	Once/week	0	X	0
114	Final hot rinse circulation tank 20m³	Damper 200A	Normal rotation	Visually/Rotate	Once/week	0	X	0
115			Fume leakage	Visually	Once/week	0	X	0
116			Flange leakage	Visually	Once/week	0	X	0
117		Pipe 200A	Bellows condition	Visually	Once/week	0	X	0
118			Damper condition	Visually	Once/week	0	X	0
119			Fume leakage	Visually	Once/week	0	X	0
120		Bellows 150A	Bellows condition	Visually	Once/week	0	X	0
121			Damper condition	Visually	Once/week	0	X	0
122			Fume leakage	Visually	Once/week	0	X	0
123	Vertical wringer roll unit	Damper 150A	Normal rotation	Visually/Rotate	Once/week	0	X	0
124			Fume leakage	Visually	Once/week	0	X	0
125			Flange leakage	Visually	Once/week	0	X	0
126		Pipe 150A	Bellows condition	Visually	Once/week	0	X	0
127			Damper condition	Visually	Once/week	0	X	0
128			Fume leakage	Visually	Once/week	0	X	0
129		Bellows 200A	Bellows condition	Visually	Once/week	0	X	0
130			Damper condition	Visually	Once/week	0	X	0
131			Fume leakage	Visually	Once/week	0	X	0

Item No.	Equipment	posco TCS	POSCO CGLENTY FUME SCRUBBER	Date: 9/10/12 Rev No. Page: 1/2																						
5.5.4																										
																										
<table> <tr> <th colspan="2">FAN SPECIFICATION</th> </tr> <tr> <td>CAPACITY</td> <td>700 CMH</td> </tr> <tr> <td>REVISION</td> <td>200 mmHg</td> </tr> <tr> <td>TEMP.</td> <td>85°C</td> </tr> <tr> <td>MOTOR</td> <td>37KW 4P 3p 30CV 30CV AC MOTOR</td> </tr> </table> <table> <tr> <th colspan="2">PUMP SPECIFICATION</th> </tr> <tr> <td>CAPACITY</td> <td>0.9 CMH</td> </tr> <tr> <td>REVISION</td> <td>1700 RPM</td> </tr> <tr> <td>HEAD</td> <td>20m</td> </tr> <tr> <td>NOZZLES</td> <td>100005A</td> </tr> <tr> <td>MOTOR</td> <td>5.5KW 4P 3p 30CV 30CV AC MOTOR</td> </tr> </table>					FAN SPECIFICATION		CAPACITY	700 CMH	REVISION	200 mmHg	TEMP.	85°C	MOTOR	37KW 4P 3p 30CV 30CV AC MOTOR	PUMP SPECIFICATION		CAPACITY	0.9 CMH	REVISION	1700 RPM	HEAD	20m	NOZZLES	100005A	MOTOR	5.5KW 4P 3p 30CV 30CV AC MOTOR
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MOTOR	5.5KW 4P 3p 30CV 30CV AC MOTOR																									
* CHECK ITEMS AND MEASUREMENT VALUE																										
No.	Equipment	Control Items	Management criteria	Inspect method	Meas. Cycle	Control Range	Result																			
1	Scrubber unit	Blower	Vibration	Vibration Meter	Once/week	0 mm/s 5.5 mm/s	0.4%																			
2			Temperature of bearing	Temperature gun	Once/week	35 °c 65 °c	6.0 °c																			
3			No abnormal sound	Sound rod	Once/week	0 X	0																			
4		V-belt	Grease status	Visually	Once/week	0 X	0																			
5			No abnormal sound	Sound rod	Once/week	0 X	0																			
6			Tension in belt	Visually	Once/week	0 X	0																			
7		Manual damper	Normal rotation	Visually/Rotate	Once/week	0 X	0																			
8			Soft canves	Visually	Once/week	0 X	0																			
9			Condition/leakage	Visually	Once/week	0 X	0																			
10		Mist eliminator	Demister	Visually/Clogged	Once/month	0 X	0																			
11			Spray nozzle	Visually/Clogged	Once/month	0 X	0																			
12			Water leakage	Visually	Once/week	0 X	0																			
13		Fume washer tank	Flange leakage	Visually	Once/week	0 X	0																			
14			Valve leakage	Visually	Once/week	0 X	0																			
15			Water level	Visually	Once/week	60% 80%	0.0%																			
16	Hot dip tank	Fume cir' pump	Vibration	Vibration Meter	Once/week	0 mm/s 5.5 mm/s	1.0 mm/s																			
17			No abnormal sound	Sound rod	Once/week	0 X	0																			
18			Bellovs condition	Visually	Once/week	0 X	0																			
19		Damper 200A	Damper condition	Visually	Once/week	0 X	0																			
20			Fume leakage	Visually	Once/week	0 X	0																			
21			Normal rotation	Visually/Rotate	Once/week	0 X	0																			
22		Pipe 200A	Fume leakage	Visually	Once/week	0 X	0																			
23			Flange leakage	Visually	Once/week	0 X	0																			
24			Bellovs condition	Visually	Once/week	0 X	0																			
25		Damper 200A	Damper condition	Visually	Once/week	0 X	0																			
26			Fume leakage	Visually	Once/week	0 X	0																			
27			Normal rotation	Visually/Rotate	Once/week	0 X	0																			
28		Pipe 200A	Fume leakage	Visually	Once/week	0 X	0																			
29			Flange leakage	Visually	Once/week	0 X	0																			
30			Bellovs condition	Visually	Once/week	0 X	0																			
31	Alkali mixing tank NaOH 3 - 5% 25m³	Damper 200A	Damper condition	Visually	Once/week	0 X	0																			
32			Fume leakage	Visually	Once/week	0 X	0																			
33			Normal rotation	Visually/Rotate	Once/week	0 X	0																			
34		Pipe 200A	Fume leakage	Visually	Once/week	0 X	0																			
35			Flange leakage	Visually	Once/week	0 X	0																			
36			Bellovs condition	Visually	Once/week	0 X	0																			
37		Damper 200A	Damper condition	Visually	Once/week	0 X	0																			
38			Fume leakage	Visually	Once/week	0 X	0																			
39			Normal rotation	Visually/Rotate	Once/week	0 X	0																			
40		Pipe 200A	Fume leakage	Visually	Once/week	0 X	0																			
41			Flange leakage	Visually	Once/week	0 X	0																			
42			Bellovs condition	Visually	Once/week	0 X	0																			
43		Damper 200A	Damper condition	Visually	Once/week	0 X	0																			
44			Fume leakage	Visually	Once/week	0 X	0																			
45			Normal rotation	Visually/Rotate	Once/week	0 X	0																			
46	Alkali circulation tank NaOH 3 - 5% 25m³	Pipe 200A	Fume leakage	Visually	Once/week	0 X	0																			
47			Flange leakage	Visually	Once/week	0 X	0																			
48			Bellovs condition	Visually	Once/week	0 X	0																			
49		Damper 200A	Damper condition	Visually	Once/week	0 X	0																			
50			Fume leakage	Visually	Once/week	0 X	0																			
51			Normal rotation	Visually/Rotate	Once/week	0 X	0																			
52		Pipe 200A	Fume leakage	Visually	Once/week	0 X	0																			
53			Flange leakage	Visually	Once/week	0 X	0																			
54			Bellovs condition	Visually	Once/week	0 X	0																			
55		Damper 200A	Damper condition	Visually	Once/week	0 X	0																			
56			Fume leakage	Visually	Once/week	0 X	0																			
57			Normal rotation	Visually/Rotate	Once/week	0 X	0																			
58		Pipe 200A	Fume leakage	Visually	Once/week	0 X	0																			
			Flange leakage	Visually	Once/week	0 X	0																			
			Bellovs condition	Visually	Once/week	0 X	0																			

Item No.	Equipment	posco TCS	POSCO CGL ENTRY FUME SCRUBBER				Date: 9/10/12	
5.5.4							Rev No.	
* CHECK ITEMS AND MEASUREMENT VALUE								
No.	Equipment	Control item	Management criteria	Inspect method	Meas. Cycle	Control Range		Remark
						Min	Max	
59	No.2 Alkali brush tank	Bellovs 200A	Bellovs condition	Visually	Once/week	0	X	0
60		Damper 200A	Damper condition	Visually	Once/week	0	X	0
61			Fume leakage	Visually	Once/week	0	X	0
62			Normal rotation	Visually/Rotate	Once/week	0	X	0
63		Pipe 200A	Fume leakage	Visually	Once/week	0	X	0
64			Flange leakage	Visually	Once/week	0	X	0
65			Bellovs 200A	Bellovs condition	Visually	Once/week	0	X
66		Damper 200A	Damper condition	Visually	Once/week	0	X	0
67			Fume leakage	Visually	Once/week	0	X	0
68			Normal rotation	Visually/Rotate	Once/week	0	X	0
69		Pipe 200A	Fume leakage	Visually	Once/week	0	X	0
70			Flange leakage	Visually	Once/week	0	X	0
71	Bellovs 200A		Bellovs condition	Visually	Once/week	0	X	0
72	No.23,24 Wringer roll Unit	Damper 200A	Damper condition	Visually	Once/week	0	X	0
73			Fume leakage	Visually	Once/week	0	X	0
74			Normal rotation	Visually/Rotate	Once/week	0	X	0
75		Pipe 200A	Fume leakage	Visually	Once/week	0	X	0
76			Flange leakage	Visually	Once/week	0	X	0
77			Bellovs 200A	Bellovs condition	Visually	Once/week	0	X
78		Damper 200A	Damper condition	Visually	Once/week	0	X	0
79			Fume leakage	Visually	Once/week	0	X	0
80			Normal rotation	Visually/Rotate	Once/week	0	X	0
81		Pipe 200A	Fume leakage	Visually	Once/week	0	X	0
82			Flange leakage	Visually	Once/week	0	X	0
83			Bellovs 200A	Bellovs condition	Visually	Once/week	0	X
84	Abrasive brush tank	Damper 200A	Damper condition	Visually	Once/week	0	X	0
85			Fume leakage	Visually	Once/week	0	X	0
86			Normal rotation	Visually/Rotate	Once/week	0	X	0
87		Pipe 250A	Fume leakage	Visually	Once/week	0	X	0
88			Flange leakage	Visually	Once/week	0	X	0
89			Bellovs 200A	Bellovs condition	Visually	Once/week	0	X
90		Damper 200A	Damper condition	Visually	Once/week	0	X	0
91			Fume leakage	Visually	Once/week	0	X	0
92			Normal rotation	Visually/Rotate	Once/week	0	X	0
93		Pipe 200A	Fume leakage	Visually	Once/week	0	X	0
94			Flange leakage	Visually	Once/week	0	X	0
95			Bellovs 200A	Bellovs condition	Visually	Once/week	0	X
96	No.25,26 Wringer roll Unit	Damper 200A	Damper condition	Visually	Once/week	0	X	0
97			Fume leakage	Visually	Once/week	0	X	0
98			Normal rotation	Visually/Rotate	Once/week	0	X	0
99		Pipe 200A	Fume leakage	Visually	Once/week	0	X	0
100			Flange leakage	Visually	Once/week	0	X	0
101			Bellovs 200A	Bellovs condition	Visually	Once/week	0	X
102		Damper 200A	Damper condition	Visually	Once/week	0	X	0
103			Fume leakage	Visually	Once/week	0	X	0
104			Normal rotation	Visually/Rotate	Once/week	0	X	0
105		Pipe 200A	Fume leakage	Visually	Once/week	0	X	0
106			Flange leakage	Visually	Once/week	0	X	0
107			Bellovs 200A	Bellovs condition	Visually	Once/week	0	X
108	Final hot rinse tank	Damper 200A	Damper condition	Visually	Once/week	0	X	0
109			Fume leakage	Visually	Once/week	0	X	0
110			Normal rotation	Visually/Rotate	Once/week	0	X	0
111		Pipe 200A	Fume leakage	Visually	Once/week	0	X	0
112			Flange leakage	Visually	Once/week	0	X	0
113			Bellovs 150A	Bellovs condition	Visually	Once/week	0	X
114		Damper 150A	Damper condition	Visually	Once/week	0	X	0
115			Fume leakage	Visually	Once/week	0	X	0
116			Normal rotation	Visually/Rotate	Once/week	0	X	0
117		Pipe 150A	Fume leakage	Visually	Once/week	0	X	0
118			Flange leakage	Visually	Once/week	0	X	0
			Bellovs condition	Visually	Once/week	0	X	0

Item No.

5.5.4

Equipment

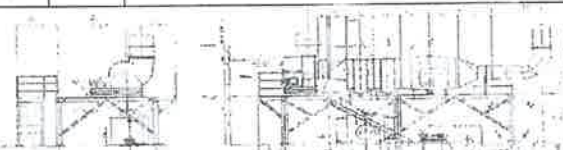
posco TCS

POSCO CGL ENTRY FUME SCRUBBER

Date: 15/04/24

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FAN SPECIFICATION

CAPACITY	700 LPM	REVOLUTION	1400 RPM
PRESSURE	700 mmHg	TEMP	80 (LWAS)

MOTOR

JIMC 4P 3P 200V 200W AC 50/60Hz

PUMP SPECIFICATION

CAPACITY	400 LPM	REVOLUTION	1700 RPM
HEAD	20m H ₂ O	TEMP	80 (LWAS)

MOTOR

JIMC 4P 3P 200V 200W AC 50/60Hz

* CHECK ITEMS AND MEASUREMENT VALUE

No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range Min/OK Max/NG	Result	
1	Scrubber unit	Blower	Vibration	Vibration Meter	Once/week	0 mm/s 5.5 mm/s	0.1	
2			Temperature of bearing	Temperature gun	Once/week	35 °C 65 °C	61.2	
3			No abnormal sound	Sound rod	Once/week	0 X	0	
4		V-belt	Grease status	Visually	Once/week	0 X	0	
5			No abnormal sound	Sound rod	Once/week	0 X	0	
6			Tension in belt	Visually	Once/week	0 X	0	
7		Manual damper	Normal rotation	Visually/Rotate	Once/week	0 X	0	
8		Soft canves	Condition/leakage	Visually	Once/week	0 X	0	
9		Mist eliminator	Demister	Visually/Clogged	Once/month	0 X	0	
10		Scrubber	Spray nozzle	Visually/Clogged	Once/month	0 X	0	
11		Fume washer tank	Water leakage	Visually	Once/week	0 X	0	
12			Flange leakage	Visually	Once/week	0 X	0	
13			Valve leakage	Visually	Once/week	0 X	0	
14		Fume cir' pump	Water level	Visually	Once/week	60% 80%	70	
15			Vibration	Vibration Meter	Once/week	0 mm/s 5.5 mm/s	1.3 mm/s	
16			No abnormal sound	Sound rod	Once/week	0 X	0	
17	Hot dip tank	Bellows 200A	Bellows condition	Visually	Once/week	0 X	0	
18		Damper 200A	Damper condition	Visually	Once/week	0 X	0	
19			Fume leakage	Visually	Once/week	0 X	0	
20			Normal rotation	Visually/Rotate	Once/week	0 X	0	
21		Pipe 200A	Fume leakage	Visually	Once/week	0 X	0	
22	Alkali mixing tank NaOH 3 - 5% 25m³	Bellows 200A	Flange leakage	Visually	Once/week	0 X	0	
23		Damper 200A	Bellows condition	Visually	Once/week	0 X	0	
24			Damper condition	Visually	Once/week	0 X	0	
25			Fume leakage	Visually	Once/week	0 X	0	
26		Pipe 200A	Normal rotation	Visually/Rotate	Once/week	0 X	0	
27	No.1 Alkali brush tank		Fume leakage	Visually	Once/week	0 X	0	
28	Bellows 200A	Flange leakage	Visually	Once/week	0 X	0		
29		Bellows condition	Visually	Once/week	0 X	0		
30		Damper condition	Visually	Once/week	0 X	0		
31	Damper 200A	Fume leakage	Visually	Once/week	0 X	0		
32		Normal rotation	Visually/Rotate	Once/week	0 X	0		
33		Fume leakage	Visually	Once/week	0 X	0		
34	Alkali circulation tank NaOH 3 - 5% 25m³	Pipe 200A	Flange leakage	Visually	Once/week	0 X	0	
35			Bellows 200A	Bellows condition	Visually	Once/week	0 X	0
36			Damper condition	Visually	Once/week	0 X	0	
37		Damper 200A	Fume leakage	Visually	Once/week	0 X	0	
38			Normal rotation	Visually/Rotate	Once/week	0 X	0	
39	Fume leakage		Visually	Once/week	0 X	0		
40	No.11,12 wringer roll Unit	Pipe 200A	Flange leakage	Visually	Once/week	0 X	0	
41			Bellows 200A	Bellows condition	Visually	Once/week	0 X	0
42			Damper condition	Visually	Once/week	0 X	0	
43		Damper 200A	Fume leakage	Visually	Once/week	0 X	0	
44			Normal rotation	Visually/Rotate	Once/week	0 X	0	
45	Electrolytic Cleaning Unit	Pipe 200A	Fume leakage	Visually	Once/week	0 X	0	
46			Flange leakage	Visually	Once/week	0 X	0	
47			Bellows 200A	Bellows condition	Visually	Once/week	0 X	0
48		Damper 200A	Damper condition	Visually	Once/week	0 X	0	
49			Fume leakage	Visually	Once/week	0 X	0	
50	Normal rotation		Visually/Rotate	Once/week	0 X	0		
51	No.21,22 Wringer roll Unit	Pipe 200A	Fume leakage	Visually	Once/week	0 X	0	
52			Flange leakage	Visually	Once/week	0 X	0	
53			Bellows 200A	Bellows condition	Visually	Once/week	0 X	0
54		Damper 200A	Damper condition	Visually	Once/week	0 X	0	
55			Fume leakage	Visually	Once/week	0 X	0	
56	Normal rotation		Visually/Rotate	Once/week	0 X	0		
57	Pipe 200A	Fume leakage	Visually	Once/week	0 X	0		
58		Flange leakage	Visually	Once/week	0 X	0		

Item No.	Equipment	POSCO TCS	POSCO CGL ENTRY FUME SCRUBBER				Date: 15/04/24	Rev No.
5.5.4							Page: 2/2	
* CHECK ITEMS AND MEASUREMENT VALUE								
No.	Equipment	Control item	Management criteria	Inspect method	Meas. Cycle	Control Range		Remark
						Min	Max	
59	No.2 Alkali brush tank	Bellows 200A	Bellows condition	Visually	Once/week	0	X	0
60		Damper 200A	Damper condition	Visually	Once/week	0	X	0
61			Fume leakage	Visually	Once/week	0	X	0
62			Normal rotation	Visually/Rotate	Once/week	0	X	0
63		Pipe 200A	Fume leakage	Visually	Once/week	0	X	0
64	ECT filter tank	Bellows 200A	Flange leakage	Visually	Once/week	0	X	0
65			Bellows condition	Visually	Once/week	0	X	0
66			Damper condition	Visually	Once/week	0	X	0
67		Damper 200A	Fume leakage	Visually	Once/week	0	X	0
68			Normal rotation	Visually/Rotate	Once/week	0	X	0
69	Fume leakage		Visually	Once/week	0	X	0	
70	No.23,24 Wringer roll Unit	Pipe 200A	Flange leakage	Visually	Once/week	0	X	0
71		Bellows 200A	Bellows condition	Visually	Once/week	0	X	0
72		Damper 200A	Damper condition	Visually	Once/week	0	X	0
73			Fume leakage	Visually	Once/week	0	X	0
74			Normal rotation	Visually/Rotate	Once/week	0	X	0
75	ECT circulation tank NaOH 3 - 5% 25m³	Pipe 200A	Fume leakage	Visually	Once/week	0	X	0
76		Bellows 200A	Flange leakage	Visually	Once/week	0	X	0
77			Bellows condition	Visually	Once/week	0	X	0
78			Damper condition	Visually	Once/week	0	X	0
79		Abrasive brush tank	Damper 200A	Fume leakage	Visually	Once/week	0	X
80	Damper 200A		Normal rotation	Visually/Rotate	Once/week	0	X	0
81			Fume leakage	Visually	Once/week	0	X	0
82			Flange leakage	Visually	Once/week	0	X	0
83	Bellows 200A		Bellows condition	Visually	Once/week	0	X	0
84	Abrasive brush circulation tank 20m³	Damper 200A	Damper condition	Visually	Once/week	0	X	0
85			Fume leakage	Visually	Once/week	0	X	0
86			Normal rotation	Visually/Rotate	Once/week	0	X	0
87		Pipe 250A	Fume leakage	Visually	Once/week	0	X	0
88			Flange leakage	Visually	Once/week	0	X	0
89	Bellows 200A		Bellows condition	Visually	Once/week	0	X	0
90	No.25,26 Wringer roll Unit	Damper 200A	Damper condition	Visually	Once/week	0	X	0
91			Fume leakage	Visually	Once/week	0	X	0
92			Normal rotation	Visually/Rotate	Once/week	0	X	0
93		Pipe 200A	Fume leakage	Visually	Once/week	0	X	0
94		Final hot rinse circulation tank 20m³	Bellows 200A	Flange leakage	Visually	Once/week	0	X
95	Bellows condition			Visually	Once/week	0	X	0
96	Damper condition			Visually	Once/week	0	X	0
97	Damper 200A		Fume leakage	Visually	Once/week	0	X	0
98			Normal rotation	Visually/Rotate	Once/week	0	X	0
99		Fume leakage	Visually	Once/week	0	X	0	
100	Final hot rinse tank	Pipe 200A	Flange leakage	Visually	Once/week	0	X	0
101		Bellows 200A	Bellows condition	Visually	Once/week	0	X	0
102			Damper condition	Visually	Once/week	0	X	0
103			Fume leakage	Visually	Once/week	0	X	0
104		Vertical wringer roll unit	Damper 200A	Normal rotation	Visually/Rotate	Once/week	0	X
105	Fume leakage			Visually	Once/week	0	X	0
106	Flange leakage			Visually	Once/week	0	X	0
107	Bellows 200A		Bellows condition	Visually	Once/week	0	X	0
108			Damper condition	Visually	Once/week	0	X	0
109		Fume leakage	Visually	Once/week	0	X	0	
110	Vertical wringer roll unit	Damper 200A	Normal rotation	Visually/Rotate	Once/week	0	X	0
111			Fume leakage	Visually	Once/week	0	X	0
112			Flange leakage	Visually	Once/week	0	X	0
113		Pipe 200A	Bellows condition	Visually	Once/week	0	X	0
114		Vertical wringer roll unit	Bellows 150A	Damper condition	Visually	Once/week	0	X
115	Fume leakage			Visually	Once/week	0	X	0
116	Normal rotation			Visually/Rotate	Once/week	0	X	0
117	Damper 150A		Fume leakage	Visually	Once/week	0	X	0
118			Flange leakage	Visually	Once/week	0	X	0

Item No.
5.5.4

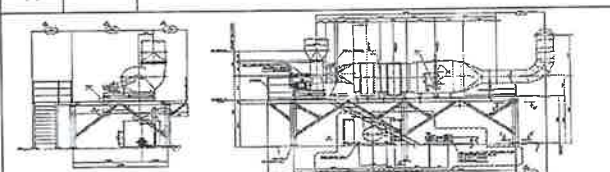
Equipment
posco
TCS

POSCO CGI ENTRY FUME SCRUBBER

Date: 18/06/24

Rev No.

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FAN SPECIFICATION			
CAPACITY	200 QM	REVOLUTION	1400 RPM
PRESSURE	200 mmHg	TEMP.	60°C MAX
MOTOR	370W 4P 34 50Hz 380V AC MOTOR		

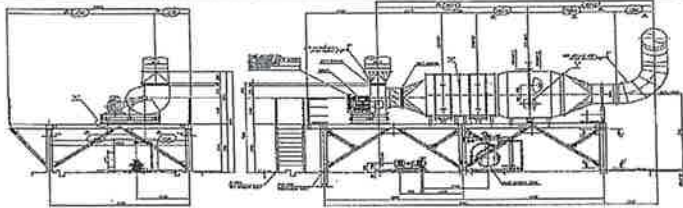
PUMP SPECIFICATION			
CAPACITY	0.9 QM	REVOLUTION	1780 RPM
HEAD	20mH	MOTORS	1500W
MOTOR	3.50kW 4P 34 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE

No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range Min/OK Max/NG	Result
1	Scrubber unit	Blower	Vibration	Vibration Meter	Once/week	0 mm/s 5.5 mm/s	1.4 mm/s
2			Temperature of bearing	Temperature gun	Once/week	35 °C 55 °C	53.4 °C
3			No abnormal sound	Sound rod	Once/week	0 X	○
4		V-belt	Grease status	Visually	Once/week	0 X	○
5			No abnormal sound	Sound rod	Once/week	0 X	○
6			Tension in belt	Visually	Once/week	0 X	○
7		Manual damper	Normal rotation	Visually/Rotate	Once/week	0 X	○
8		Soft canvas	Condition/leakage	Visually	Once/week	0 X	○
9		Mist eliminator	Demister	Visually/Clogged	Once/month	0 X	○
10		Scrubber	Spray nozzle	Visually/Clogged	Once/month	0 X	○
11		Fume washer tank	Water leakage	Visually	Once/week	0 X	○
12			Flange leakage	Visually	Once/week	0 X	○
13			Valve leakage	Visually	Once/week	0 X	○
14		Fume cir' pump	Water level	Visually	Once/week	60% 80%	60%
15			Vibration	Vibration Meter	Once/week	0 mm/s 5.5 mm/s	1.5 mm/s
16			No abnormal sound	Sound rod	Once/week	0 X	○
17	Hot dip tank	Bellows 200A	Bellows condition	Visually	Once/week	0 X	○
18		Damper 200A	Damper condition	Visually	Once/week	0 X	○
19			Fume leakage	Visually	Once/week	0 X	○
20			Normal rotation	Visually/Rotate	Once/week	0 X	○
21		Pipe 200A	Fume leakage	Visually	Once/week	0 X	○
22	Alkali mixing tank NaOH 3 - 5% 25m³	Bellows 200A	Flange leakage	Visually	Once/week	0 X	○
23			Bellows condition	Visually	Once/week	0 X	○
24			Damper condition	Visually	Once/week	0 X	○
25		Damper 200A	Fume leakage	Visually	Once/week	0 X	○
26			Normal rotation	Visually/Rotate	Once/week	0 X	○
27	No.1 Alkali brush tank	Pipe 200A	Fume leakage	Visually	Once/week	0 X	○
28		Bellows 200A	Flange leakage	Visually	Once/week	0 X	○
29			Bellows condition	Visually	Once/week	0 X	○
30			Damper condition	Visually	Once/week	0 X	○
31		Damper 200A	Fume leakage	Visually	Once/week	0 X	○
32	Alkali circulation tank NaOH 3 - 5% 25m³		Normal rotation	Visually/Rotate	Once/week	0 X	○
33	Pipe 200A	Fume leakage	Visually	Once/week	0 X	○	
34		Flange leakage	Visually	Once/week	0 X	○	
35		Normal rotation	Visually/Rotate	Once/week	0 X	○	
36	No.11,12 Wringer roll Unit	Bellows 200A	Bellows condition	Visually	Once/week	0 X	○
37		Damper 200A	Damper condition	Visually	Once/week	0 X	○
38			Fume leakage	Visually	Once/week	0 X	○
39			Normal rotation	Visually/Rotate	Once/week	0 X	○
40		Pipe 200A	Fume leakage	Visually	Once/week	0 X	○
41	Electrolytic Cleaning Unit	Bellows 200A	Flange leakage	Visually	Once/week	0 X	○
42			Bellows condition	Visually	Once/week	0 X	○
43			Damper condition	Visually	Once/week	0 X	○
44		Damper 200A	Fume leakage	Visually	Once/week	0 X	○
45			Normal rotation	Visually/Rotate	Once/week	0 X	○
46	No.21,22 Wringer roll Unit	Pipe 200A	Fume leakage	Visually	Once/week	0 X	○
47			Flange leakage	Visually	Once/week	0 X	○
48			Normal rotation	Visually/Rotate	Once/week	0 X	○
49		Bellows 200A	Fume leakage	Visually	Once/week	0 X	○
50			Bellows condition	Visually	Once/week	0 X	○
51	No.21,22 Wringer roll Unit	Pipe 200A	Fume leakage	Visually	Once/week	0 X	○
52			Flange leakage	Visually	Once/week	0 X	○
53			Bellows condition	Visually	Once/week	0 X	○
54		Damper 200A	Damper condition	Visually	Once/week	0 X	○
55			Fume leakage	Visually	Once/week	0 X	○
56	Pipe 200A	Normal rotation	Visually/Rotate	Once/week	0 X	○	
57		Fume leakage	Visually	Once/week	0 X	○	
58		Flange leakage	Visually	Once/week	0 X	○	

Item No. 5.5.4	Equipment	posco TCS		POSCO CGL ENTRY FUME SCRUBBER			Date: 18/06/24 Rev No. Page: 2/2		
* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control Item	Management criteria	Inspect method	Meas. Cycle	Control Range Min Max		Remark	
59	No.2 Alkali brush tank	Bellows 200A	Bellows condition	Visually	Once/week	0	X	○	
60		Damper 200A	Damper condition	Visually	Once/week	0	X	○	
61			Fume leakage	Visually	Once/week	0	X	○	
62			Normal rotation	Visually/Rotate	Once/week	0	X	○	
63		Pipe 200A	Fume leakage	Visually	Once/week	0	X	○	
64	ECT filter tank	Bellows 200A	Flange leakage	Visually	Once/week	0	X	○	
65			Bellows condition	Visually	Once/week	0	X	○	
66			Damper condition	Visually	Once/week	0	X	○	
67		Damper 200A	Fume leakage	Visually	Once/week	0	X	○	
68			Normal rotation	Visually/Rotate	Once/week	0	X	○	
69	No.23,24 Wringer roll Unit	Pipe 200A	Fume leakage	Visually	Once/week	0	X	○	
70			Flange leakage	Visually	Once/week	0	X	○	
71			Bellows condition	Visually	Once/week	0	X	○	
72		Damper 200A	Damper condition	Visually	Once/week	0	X	○	
73			Fume leakage	Visually	Once/week	0	X	○	
74	ECT circulation tank NaOH 3 - 5% 25m³	Normal rotation	Visually/Rotate	Once/week	0	X	○		
75			Fume leakage	Visually	Once/week	0	X	○	
76			Flange leakage	Visually	Once/week	0	X	○	
77		Bellows 200A	Bellows condition	Visually	Once/week	0	X	○	
78			Damper condition	Visually	Once/week	0	X	○	
79	Abrasive brush tank	Damper 200A	Fume leakage	Visually	Once/week	0	X	○	
80			Normal rotation	Visually/Rotate	Once/week	0	X	○	
81			Fume leakage	Visually	Once/week	0	X	○	
82		Pipe 200A	Flange leakage	Visually	Once/week	0	X	○	
83			Bellows 200A	Bellows condition	Visually	Once/week	0	X	○
84	Abrasive brush circulation tank 20m³	Damper condition	Visually	Once/week	0	X	○		
85			Fume leakage	Visually	Once/week	0	X	○	
86			Normal rotation	Visually/Rotate	Once/week	0	X	○	
87		Pipe 250A	Fume leakage	Visually	Once/week	0	X	○	
88			Flange leakage	Visually	Once/week	0	X	○	
89	No.25,26 Wringer roll Unit	Bellows 200A	Bellows condition	Visually	Once/week	0	X	○	
90			Damper condition	Visually	Once/week	0	X	○	
91			Fume leakage	Visually	Once/week	0	X	○	
92		Damper 200A	Normal rotation	Visually/Rotate	Once/week	0	X	○	
93			Fume leakage	Visually	Once/week	0	X	○	
94	Final hot rinse circulation tank 20m³	Pipe 200A	Flange leakage	Visually	Once/week	0	X	○	
95			Bellows 200A	Bellows condition	Visually	Once/week	0	X	○
96			Damper condition	Visually	Once/week	0	X	○	
97		Damper 200A	Fume leakage	Visually	Once/week	0	X	○	
98			Normal rotation	Visually/Rotate	Once/week	0	X	○	
99	Final hot rinse tank	Pipe 200A	Fume leakage	Visually	Once/week	0	X	○	
100			Flange leakage	Visually	Once/week	0	X	○	
101			Bellows 200A	Bellows condition	Visually	Once/week	0	X	○
102		Damper condition	Visually	Once/week	0	X	○		
103			Fume leakage	Visually	Once/week	0	X	○	
104	Vertical wringer roll unit	Damper 200A	Normal rotation	Visually/Rotate	Once/week	0	X	○	
105			Fume leakage	Visually	Once/week	0	X	○	
106			Flange leakage	Visually	Once/week	0	X	○	
107		Bellows 200A	Bellows condition	Visually	Once/week	0	X	○	
108			Damper condition	Visually	Once/week	0	X	○	
109	Vertical wringer roll unit	Damper 200A	Fume leakage	Visually	Once/week	0	X	○	
110			Normal rotation	Visually/Rotate	Once/week	0	X	○	
111			Fume leakage	Visually	Once/week	0	X	○	
112		Pipe 200A	Flange leakage	Visually	Once/week	0	X	○	
113			Bellows 150A	Bellows condition	Visually	Once/week	0	X	○
114	Vertical wringer roll unit	Damper 150A	Damper condition	Visually	Once/week	0	X	○	
115			Fume leakage	Visually	Once/week	0	X	○	
116			Normal rotation	Visually/Rotate	Once/week	0	X	○	
117		Pipe 150A	Fume leakage	Visually	Once/week	0	X	○	
118			Flange leakage	Visually	Once/week	0	X	○	

Item No.	Equipment	posco TCS		POSCO COIL CENTER-2 POST TREATMENT FUME SCRUBBER		Date: 08/01/25	
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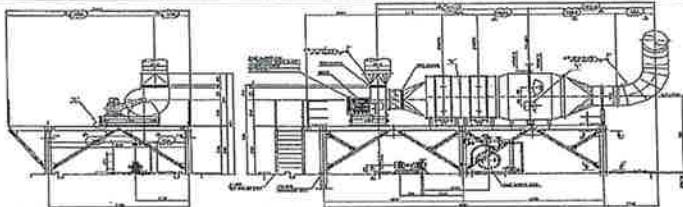


FAN SPECIFICATION			
CAPACITY	650 CMH	REVOLUTION	2000 RPM
STATIC PRESSURE	350 mmHg	TEMP.	85 °C
MOTOR 75KW 4P 3φ 60Hz 380V AC MOTOR			
PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80AX55A
MOTOR 5.5KW 4P 3φ 50Hz 380V AC MOTOR			

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control Items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	5.95 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	34.0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80%	
Leak solution	Visually		Once/month	0	X	0			
Pump	Leak solution	Visually	Once/week	0	X	0			
	Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.12 mm/s			
	Coupling alignment	Dial gauge	Once/year	0	0.5 mm				

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Item No.	Equipment	posco TCS		POSCO COIL CENTER-2 POST TREATMENT FUME SCRUBBER		Date: 15/01/25	
5.5.4						Rev No. 01	
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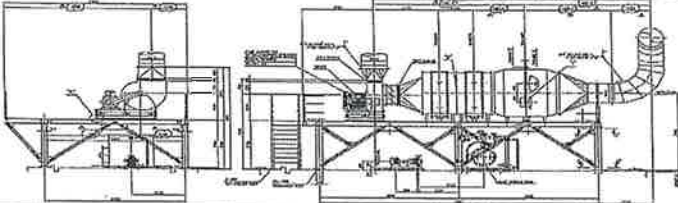


FAN SPECIFICATION			
CAPACITY	650 CMH	REVOLUTION	2000 RPM
STATIC PRESSURE	350 mmHg	TEMP.	85 °C
MOTOR 75KW 4P 3φ 60Hz 380V AC MOTOR			
PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80AX55A
MOTOR 5.5KW 4P 3φ 50Hz 380V AC MOTOR			

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control Items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	3.47 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	36.3	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80%	
Leak solution	Visually		Once/month	0	X	0			
Pump	Leak solution	Visually	Once/week	0	X	0			
	Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	0.83 mm/s			
	Coupling alignment	Dial gauge	Once/year	0	0.5 mm				

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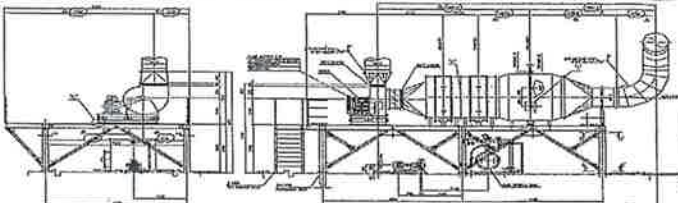
FAN SPECIFICATION			
CAPACITY	650 CMH	REVOLUTION	2000 RPM
STATIC PRESSURE	350 mmAq	TEMP.	85 °C
MOTOR 75KW 4P 3ø 50Hz 380V AC MOTOR			
PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X85A
MOTOR 5.5KW 4P 3ø 50Hz 380V AC MOTOR			

*** CHECK ITEMS AND MEASUREMENT VALUE**

No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	3.26 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	38.1	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack ori seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80%	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Leak solution	Visually	Once/week	0	X	0	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.91 mm/s	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

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Item No.	Equipment	posco TCS		Date : 7/2/25	
5.5.4		POSICO LGL CENTER-2 POST TREATMENT FUME SCRUBBER		Rev No. 01	
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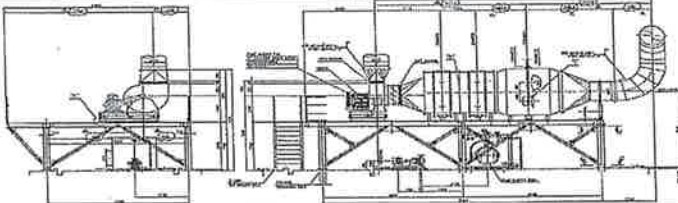
FAN SPECIFICATION			
CAPACITY	650 CMH	REVOLUTION	2000 RPM
STATIC PRESSURE	350 mmAq	TEMP.	85 °C
MOTOR 75KW 4P 3ø 50Hz 380V AC MOTOR			
PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X85A
MOTOR 5.5KW 4P 3ø 50Hz 380V AC MOTOR			

*** CHECK ITEMS AND MEASUREMENT VALUE**

No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	1.20 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	52.6	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80%	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Leak solution	Visually	Once/week	0	X	0	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.26 mm/s	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

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Item No.	Equipment	posco TCS		POSCO UGL CENTER-2 POST TREATMENT FUME SCRUBBER	Date : 14 / 2 / 25
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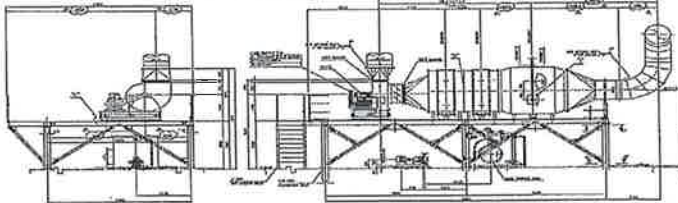


FAN SPECIFICATION			
CAPACITY	850 CMM	REVOLUTION	2000 RPM
STATIC PRESSURE	350 mmHg	TEMP.	85 °C
MOTOR 75KW 4P 3ø 50Hz 380V AC MOTOR			
PUMP SPECIFICATION			
CAPACITY	0.9 CMM	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80AX85A
MOTOR 5.5KW 4P 3ø 50Hz 380V AC MOTOR			

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	3.24 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	82.9	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80%	
Leak solution	Visually		Once/month	0	X	0			
Pump	Leak solution	Visually	Once/week	0	X	0			
	Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.43 mm/s			
	Coupling alignment	Dial gauge	Once/year	0	0.5 mm				

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Item No.	Equipment	posco TCS		POSCO UGL CENTER-2 POST TREATMENT FUME SCRUBBER	Date : 21 / 2 / 25
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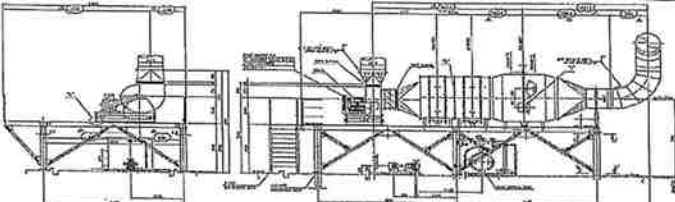


FAN SPECIFICATION			
CAPACITY	850 CMM	REVOLUTION	2000 RPM
STATIC PRESSURE	350 mmHg	TEMP.	85 °C
MOTOR 75KW 4P 3ø 50Hz 380V AC MOTOR			
PUMP SPECIFICATION			
CAPACITY	0.9 CMM	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80AX85A
MOTOR 5.5KW 4P 3ø 50Hz 380V AC MOTOR			

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	2.95 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	82.2	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80%	
Leak solution	Visually		Once/month	0	X	0			
Pump	Leak solution	Visually	Once/week	0	X	0			
	Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.05 mm/s			
	Coupling alignment	Dial gauge	Once/year	0	0.5 mm				

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Item No.	Equipment	posco TCS		POSCO CCL CENTER-2 POST TREATMENT FUME SCRUBBER		Date: 07/03/25	
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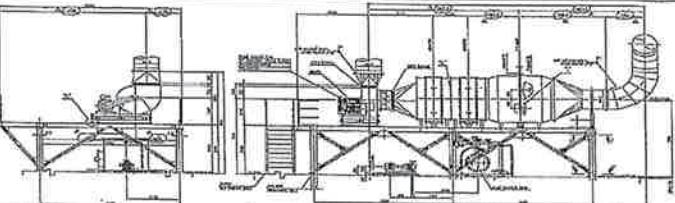
FAN SPECIFICATION			
CAPACITY	650 CMH	REVOLUTION	2000 RPM
STATIC PRESSURE	350 mmHg	TEMP.	85 °C
MOTOR 75KW 4P 3φ 50Hz 380V AC MOTOR			

PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	180X55A
MOTOR 5.5KW 4P 3φ 50Hz 380V AC MOTOR			

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	4.9 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	54.9	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	60	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Leak solution	Visually	Once/week	0	X	0	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	0.4 mm/s	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

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Item No.	Equipment	posco TCS		POSCO CCL CENTER-2 POST TREATMENT FUME SCRUBBER		Date: 14/03/25	
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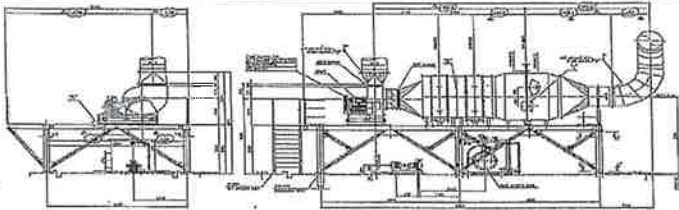


FAN SPECIFICATION			
CAPACITY	650 CMH	REVOLUTION	2000 RPM
STATIC PRESSURE	350 mmHg	TEMP.	85 °C
MOTOR 75KW 4P 3φ 50Hz 380V AC MOTOR			

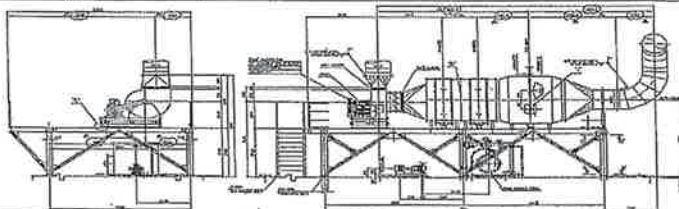
PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	180X55A
MOTOR 5.5KW 4P 3φ 50Hz 380V AC MOTOR			

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	9.5 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	55.6	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Leak solution	Visually	Once/week	0	X	0	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.32 mm/s	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

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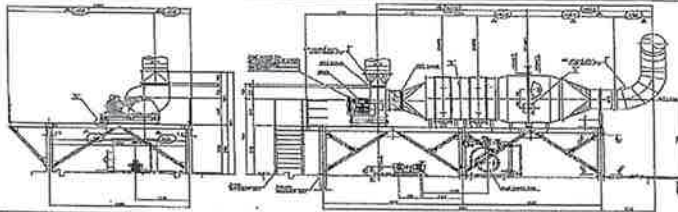
Item No.	Equipment	posco TCS		POSCO CCL CENTER-2 POST TREATMENT FUME SCRUBBER		Date : 21-03-25																																
5.5.4						Rev No. 01																																
						Page : 01																																
						<table><tr><th colspan="4">FAN SPECIFICATION</th></tr><tr><td>CAPACITY</td><td>650 CMH</td><td>REVOLUTION</td><td>2000 RPM</td></tr><tr><td>STATIC PRESSURE</td><td>350 mmHg</td><td>TEMP.</td><td>85 °C</td></tr><tr><td>MOTOR</td><td colspan="3">75KW 4P 3ø 50Hz 380V AC MOTOR</td></tr></table> <table><tr><th colspan="4">PUMP SPECIFICATION</th></tr><tr><td>CAPACITY</td><td>0.8 CMH</td><td>REVOLUTION</td><td>1780 RPM</td></tr><tr><td>HEAD</td><td>20mH</td><td>NOZZLES</td><td>80X65A</td></tr><tr><td>MOTOR</td><td colspan="3">5.5KW 4P 3ø 50Hz 380V AC MOTOR</td></tr></table>	FAN SPECIFICATION				CAPACITY	650 CMH	REVOLUTION	2000 RPM	STATIC PRESSURE	350 mmHg	TEMP.	85 °C	MOTOR	75KW 4P 3ø 50Hz 380V AC MOTOR			PUMP SPECIFICATION				CAPACITY	0.8 CMH	REVOLUTION	1780 RPM	HEAD	20mH	NOZZLES	80X65A	MOTOR	5.5KW 4P 3ø 50Hz 380V AC MOTOR		
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* CHECK ITEMS AND MEASUREMENT VALUE																																						
No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark																													
						Min	Max																															
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	4.23 mm/s																														
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	53.9																														
			No abnormal sound	Sound rod	Once/week	0	X	0																														
		V-belt	Grease status	Visually	Once/week	0	X	0																														
			No abnormal sound	Sound rod	Once/week	0	X	0																														
		Valva	Loss tension in belt	Visually	Once/week	0	X	0																														
			Leak solution	Visually	Once/week	0	X	0																														
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0																														
			Grease status	Visually	Once/week	0	X	0																														
		Soft Canvas	Handle normal operation	Visually	Once/week	0	X	0																														
			Tear on rubber	Visually	Once/week	0	X	0																														
		Man hole (Top)	Leak solution	Visually	Once/week	0	X	0																														
			Crack on seal	Visually	Once/month	0	X	0																														
		Man hole (Side)	Leak solution	Visually	Once/month	0	X	0																														
			Crack on seal	Visually	Once/month	0	X	0																														
		Tank	Leak solution	Visually	Once/month	0	X	0																														
			Waste stale(Demister)	Visually	Once/6month	0	X	0																														
			Nozzle spray flow	Visually	Once/6month	0	X	0																														
		Septic tank	Leak solution	Visually	Once/month	0	X	0																														
			Water level	Visually	Once/week	50%	80%	80																														
		Pump	Leak solution	Visually	Once/month	0	X	0																														
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.2 mm/s																														
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-																														

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Item No.	Equipment	posco TCS		POSCO CCL CENTER-2 POST TREATMENT FUME SCRUBBER		Date : 28/03/25																																
5.5.4						Rev No. 01																																
						Page : 01																																
						<table><tr><th colspan="4">FAN SPECIFICATION</th></tr><tr><td>CAPACITY</td><td>650 CMH</td><td>REVOLUTION</td><td>2060 RPM</td></tr><tr><td>STATIC PRESSURE</td><td>350 mmHg</td><td>TEMP.</td><td>85 °C</td></tr><tr><td>MOTOR</td><td colspan="3">75KW 4P 3ø 50Hz 380V AC MOTOR</td></tr></table> <table><tr><th colspan="4">PUMP SPECIFICATION</th></tr><tr><td>CAPACITY</td><td>0.8 CMH</td><td>REVOLUTION</td><td>1780 RPM</td></tr><tr><td>HEAD</td><td>20mH</td><td>NOZZLES</td><td>80X65A</td></tr><tr><td>MOTOR</td><td colspan="3">5.5KW 4P 3ø 50Hz 380V AC MOTOR</td></tr></table>	FAN SPECIFICATION				CAPACITY	650 CMH	REVOLUTION	2060 RPM	STATIC PRESSURE	350 mmHg	TEMP.	85 °C	MOTOR	75KW 4P 3ø 50Hz 380V AC MOTOR			PUMP SPECIFICATION				CAPACITY	0.8 CMH	REVOLUTION	1780 RPM	HEAD	20mH	NOZZLES	80X65A	MOTOR	5.5KW 4P 3ø 50Hz 380V AC MOTOR		
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* CHECK ITEMS AND MEASUREMENT VALUE																																						
No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark																													
						Min	Max																															
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	3.85 mm/s																														
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	56.3																														
			No abnormal sound	Sound rod	Once/week	0	X	0																														
		V-belt	Grease status	Visually	Once/week	0	X	0																														
			No abnormal sound	Sound rod	Once/week	0	X	0																														
		Valve	Loss tension in belt	Visually	Once/week	0	X	0																														
			Leak solution	Visually	Once/week	0	X	0																														
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0																														
			Grease status	Visually	Once/week	0	X	0																														
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0																														
			Leak solution	Visually	Once/week	0	X	0																														
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0																														
			Leak solution	Visually	Once/month	0	X	0																														
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0																														
			Leak solution	Visually	Once/month	0	X	0																														
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0																														
			Nozzle spray flow	Visually	Once/6month	0	X	0																														
			Leak solution	Visually	Once/month	0	X	0																														
		Septic tank	Water level	Visually	Once/week	50%	80%	80																														
			Leak solution	Visually	Once/month	0	X	0																														
		Pump	Leak solution	Visually	Once/week	0	X	0																														
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.41 mm/s																														
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-																														

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Item No.	Equipment	posco TCS	POSCO COIL CENTER-2 POST TREATMENT FUME SCRUBBER	Date: 03/02/25
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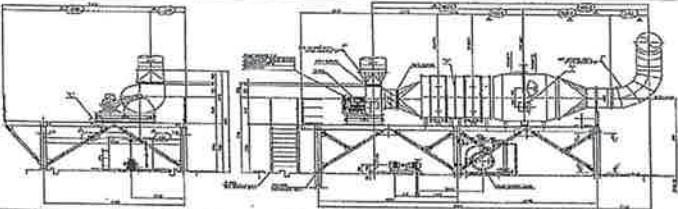
FAN SPECIFICATION			
CAPACITY	650 CUM	REVOLUTION	2000 RPM
STATIC PRESSURE	350 mmHg	TEMP.	85 °C
MOTOR	75KW 4P 3φ 50HZ 380V AC MOTOR		
PUMP SPECIFICATION			
CAPACITY	0.9 CMM	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	180X65A
MOTOR	5.5KW 4P 3φ 50HZ 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE

No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	3.18 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	50.3 °C	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		Valve	Loss tension in belt	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80 %	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Leak solution	Visually	Once/week	0	X	0	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.36 mm/s	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

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Item No.	Equipment	posco TCS	POSCO COIL CENTER-2 POST TREATMENT FUME SCRUBBER	Date: 10/02/25
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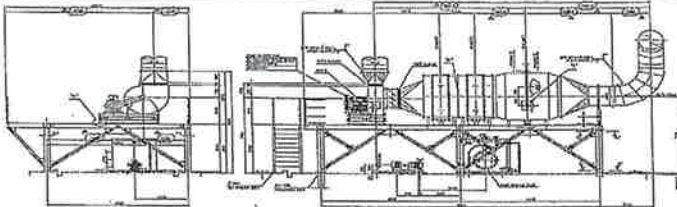
FAN SPECIFICATION			
CAPACITY	650 CMM	REVOLUTION	2000 RPM
STATIC PRESSURE	350 mmHg	TEMP.	85 °C
MOTOR	75KW 4P 3φ 50Hz 380V AC MOTOR		
PUMP SPECIFICATION			
CAPACITY	0.9 CMM	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	180X65A
MOTOR	5.5KW 4P 3φ 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE

No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	2.96 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	51.3 °C	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		Valve	Loss tension in belt	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80 %	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Leak solution	Visually	Once/week	0	X	0	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.43 mm/s	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

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Item No.	Equipment	posco TCS	POSCO CCL CENTER-2 POST TREATMENT FUME SCRUBBER	Date : 17/02/25
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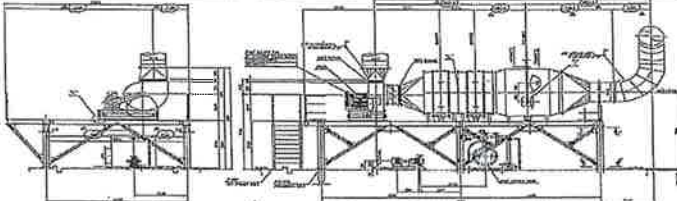
FAN SPECIFICATION			
CAPACITY	650 CMH	REVOLUTION	2000 RPM
STATIC PRESSURE	350 mmHg	TEMP.	85 °C
MOTOR 75KW 4P 3ø 50Hz 380V AC MOTOR			

PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80AX85A
MOTOR 5.5KW 4P 3ø 50Hz 380V AC MOTOR			

* CHECK ITEMS AND MEASUREMENT VALUE

No.	Equipment	Control Items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	3.19 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	56.1 °	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		Valve	Loss tension in belt	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Soft Canvas	Grease status	Visually	Once/week	0	X	0	
			Tear on rubber	Visually	Once/week	0	X	0	
		Man hole (Top)	Leak solution	Visually	Once/week	0	X	0	
			Crack on seal	Visually	Once/month	0	X	0	
		Man hole (Side)	Leak solution	Visually	Once/month	0	X	0	
			Crack on seal	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
		Septic tank	Leak solution	Visually	Once/month	0	X	0	
			Water level	Visually	Once/week	50%	80%	80 %	
		Pump	Leak solution	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Pump	Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.09 mm/s	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

Item No.	Equipment	posco TCS	POSCO CCL CENTER-2 POST TREATMENT FUME SCRUBBER	Date : 24/02/25
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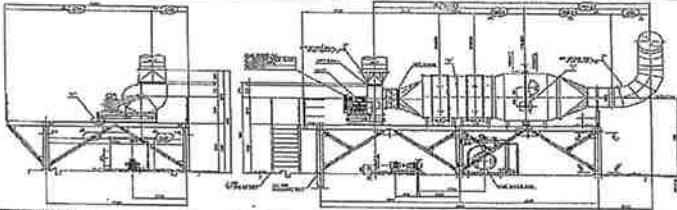
FAN SPECIFICATION			
CAPACITY	650 CMH	REVOLUTION	2000 RPM
STATIC PRESSURE	350 mmHg	TEMP.	85 °C
MOTOR 75KW 4P 3ø 50Hz 380V AC MOTOR			

PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80AX85A
MOTOR 5.5KW 4P 3ø 50Hz 380V AC MOTOR			

* CHECK ITEMS AND MEASUREMENT VALUE

No.	Equipment	Control Items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	3.11 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	56.1 °	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		Valve	Loss tension in belt	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Soft Canvas	Grease status	Visually	Once/week	0	X	0	
			Tear on rubber	Visually	Once/week	0	X	0	
		Man hole (Top)	Leak solution	Visually	Once/week	0	X	0	
			Crack on seal	Visually	Once/month	0	X	0	
		Man hole (Side)	Leak solution	Visually	Once/month	0	X	0	
			Crack on seal	Visually	Once/month	0	X	0	
		Tank	Leak solution	Visually	Once/month	0	X	0	
			Waste stale(Demister)	Visually	Once/6month	0	X	0	
		Septic tank	Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Water level	Visually	Once/week	50%	80%	80 %	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Leak solution	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Pump	Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.43 mm/s	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

Item No.	Equipment	posco TCS	POSCO CCL CENTER-2 POST TREATMENT FUME SCRUBBER	Date: 02/05/25
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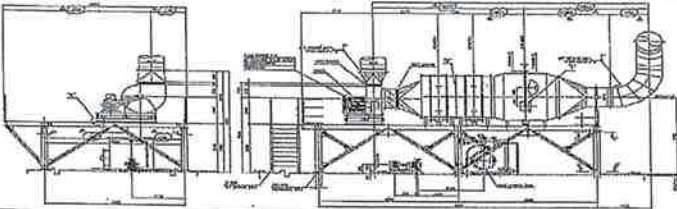
FAN SPECIFICATION			
CAPACITY	650 CMH	REVOLUTION	2000 RPM
STATIC PRESSURE	350 mmHg	TEMP.	85 °C
MOTOR 75KW 4P 3Φ 50Hz 380V AC MOTOR			

PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR 5.5KW 4P 3Φ 50Hz 380V AC MOTOR			

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	2.87 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	49.6 C	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80 %	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Leak solution	Visually	Once/week	0	X	0	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.12 mm/s	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm		

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FAN SPECIFICATION			
CAPACITY	650 CMH	REVOLUTION	2000 RPM
STATIC PRESSURE	350 mmHg	TEMP.	85 °C
MOTOR 75KW 4P 3Φ 50Hz 380V AC MOTOR			

PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR 5.5KW 4P 3Φ 50Hz 380V AC MOTOR			

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	3.15 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	50.8 C	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80 %	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Leak solution	Visually	Once/week	0	X	0	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	0.43 mm/s	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm		

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Item No.	Equipment		POSCO COIL CENTER-2 POST TREATMENT FUME SCRUBBER				Date: 16-05-25	
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FAN SPECIFICATION			
CAPACITY	650 CMH	REVOLUTION	2000 RPM
STATIC PRESSURE	350 mmHg	TEMP.	85 °C
MOTOR	75KW 4P 3Φ 50Hz 380V AC MOTOR		

PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80AX65A
MOTOR	5.5KW 4P 3Φ 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control Items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	2.91 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	51.5 °C	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		Valve	Loss tension in belt	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Handle normal operation	Visually	Once/week	0	X	0	
			Tear on rubber	Visually	Once/week	0	X	0	
		Man hole (Top)	Leak solution	Visually	Once/week	0	X	0	
			Crack on seal	Visually	Once/month	0	X	0	
		Man hole (Side)	Leak solution	Visually	Once/month	0	X	0	
			Crack on seal	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80 %	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Leak solution	Visually	Once/week	0	X	0	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.13 mm/s	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

Item No.	Equipment		POSCO COIL CENTER-2 POST TREATMENT FUME SCRUBBER				Date: 23/05/25	
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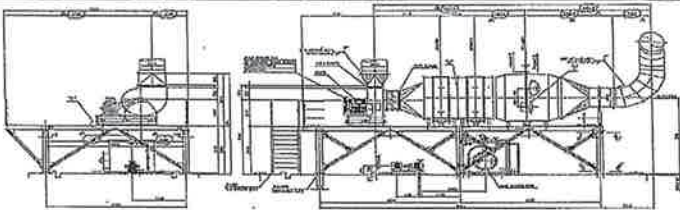
FAN SPECIFICATION			
CAPACITY	650 CMH	REVOLUTION	2000 RPM
STATIC PRESSURE	350 mmHg	TEMP.	85 °C
MOTOR	75KW 4P 3Φ 50Hz 380V AC MOTOR		

PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80AX65A
MOTOR	5.5KW 4P 3Φ 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control Items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	2.82	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	52.0 °C	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		Valve	Loss tension in belt	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Handle normal operation	Visually	Once/week	0	X	0	
			Tear on rubber	Visually	Once/week	0	X	0	
		Man hole (Top)	Leak solution	Visually	Once/week	0	X	0	
			Crack on seal	Visually	Once/month	0	X	0	
		Man hole (Side)	Leak solution	Visually	Once/month	0	X	0	
			Crack on seal	Visually	Once/month	0	X	0	
		Tank	Leak solution	Visually	Once/month	0	X	0	
			Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
		Septic tank	Leak solution	Visually	Once/month	0	X	0	
			Water level	Visually	Once/week	50%	80%	80 %	
		Pump	Leak solution	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.16	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

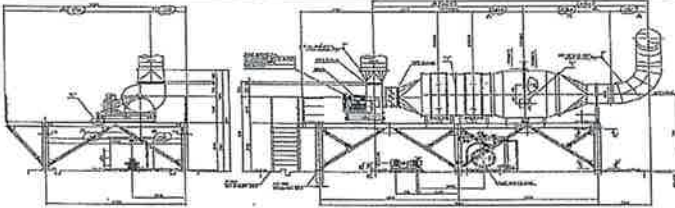
Item No.	Equipment	<div><div><div>posco</div><div>TCS</div></div><div>POSCO CCL CENTER-2 POST TREATMENT FUME SCRUBBER</div></div>		<div>Date : 06/06/25</div> <div>Rev No. 01</div> <div>Page : 01</div>	
5.5.4		<div><div><div><div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><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Item No.	Equipment	posco TCS		POSCO CCL CENTER-2 POST TREATMENT FUME SCRUBBER		Date : 13/06/25 Rev No. 01 Page : 01																																	
5.5.4						<table border="1"><thead><tr><th colspan="4">FAN SPECIFICATION</th></tr></thead><tbody><tr><td>CAPACITY</td><td>650 CMH</td><td>REVOLUTION</td><td>2000 RPM</td></tr><tr><td>STATIC PRESSURE</td><td>350 mmAq</td><td>TEMP.</td><td>85 °C</td></tr><tr><td>MOTOR</td><td colspan="3">75KW 4P 3Φ 60Hz 380V AC MOTOR</td></tr></tbody></table> <table border="1"><thead><tr><th colspan="4">PUMP SPECIFICATION</th></tr></thead><tbody><tr><td>CAPACITY</td><td>0.9 CMH</td><td>REVOLUTION</td><td>1780 RPM</td></tr><tr><td>HEAD</td><td>20mH</td><td>NOZZLES</td><td>80X05A</td></tr><tr><td>MOTOR</td><td colspan="3">5.5KW 4P 3Φ 60Hz 380V AC MOTOR</td></tr></tbody></table>		FAN SPECIFICATION				CAPACITY	650 CMH	REVOLUTION	2000 RPM	STATIC PRESSURE	350 mmAq	TEMP.	85 °C	MOTOR	75KW 4P 3Φ 60Hz 380V AC MOTOR			PUMP SPECIFICATION				CAPACITY	0.9 CMH	REVOLUTION	1780 RPM	HEAD	20mH	NOZZLES	80X05A	MOTOR	5.5KW 4P 3Φ 60Hz 380V AC MOTOR		
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No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark																														
						Min	Max																																
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	2.78																															
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	53.3℃																															
			No abnormal sound	Sound rod	Once/week	0	X	○																															
		V-belt	Grease status	Visually	Once/week	0	X	○																															
			No abnormal sound	Sound rod	Once/week	0	X	○																															
		Valva	Loss tension in belt	Visually	Once/week	0	X	○																															
			Leak solution	Visually	Once/week	0	X	○																															
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	○																															
			Grease status	Visually	Once/week	0	X	○																															
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	○																															
			Leak solution	Visually	Once/week	0	X	○																															
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	○																															
			Leak solution	Visually	Once/month	0	X	○																															
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	○																															
			Leak solution	Visually	Once/month	0	X	○																															
			Leak solution	Visually	Once/month	0	X	○																															
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	○																															
			Nozzle spray flow	Visually	Once/6month	0	X	○																															
			Leak solution	Visually	Once/month	0	X	○																															
		Septic tank	Water level	Visually	Once/week	50%	80%	80%																															
			Leak solution	Visually	Once/month	0	X	○																															
		Pump	Leak solution	Visually	Once/week	0	X	○																															
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.22																															
				Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-																														

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Item No.	Equipment	posco TOS		POSCO COL CENTER-2 POST TREATMENT FUME SCRUBBER		Date: 20/06/25	
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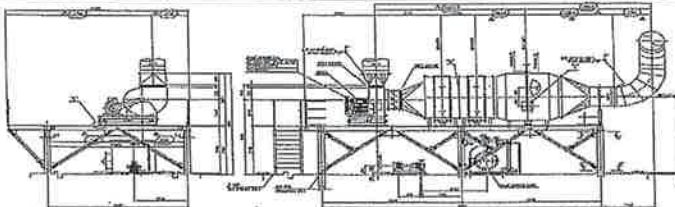
FAN SPECIFICATION			
CAPACITY	650 CMH	REVOLUTION	2000 RPM
STATIC PRESSURE	350 mmAq	TEMP.	85 °C
MOTOR 75KW 4P 3ø 50Hz 380V AC MOTOR			
PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR 5.5KW 4P 3ø 50Hz 380V AC MOTOR			

* CHECK ITEMS AND MEASUREMENT VALUE

No.	Equipment	Control Items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	2.79	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	52.6 °C	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		Valve	Loss tension in belt	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack ori seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80 %	
			Leak solution	Visually	Once/month	0	X	0	
Pump	Leak solution	Visually	Once/week	0	X	0			
	Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.20			
		Coupling alignment	Dial gauge	Once/year	0	0.5 mm			

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Item No.	Equipment	posco TOS		POSCO COL CENTER-2 POST TREATMENT FUME SCRUBBER		Date: 27/06/25	
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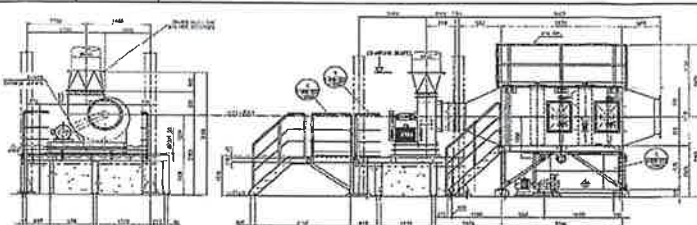


FAN SPECIFICATION			
CAPACITY	650 CMH	REVOLUTION	2000 RPM
STATIC PRESSURE	350 mmAq	TEMP.	85 °C
MOTOR 75KW 4P 3ø 50Hz 380V AC MOTOR			
PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR 5.5KW 4P 3ø 50Hz 380V AC MOTOR			

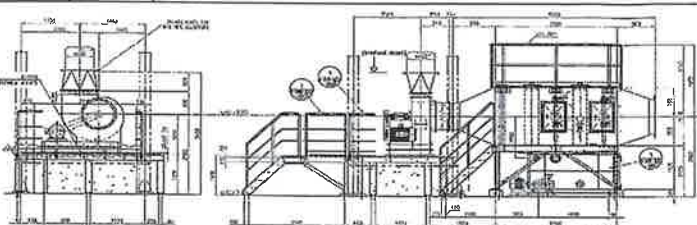
* CHECK ITEMS AND MEASUREMENT VALUE

No.	Equipment	Control Items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8mm./sec	2.75	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	53.5 °C	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		Valve	Loss tension in belt	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack ori seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80 %	
			Leak solution	Visually	Once/month	0	X	0	
Pump	Leak solution	Visually	Once/week	0	X	0			
	Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.24			
		Coupling alignment	Dial gauge	Once/year	0	0.5 mm			

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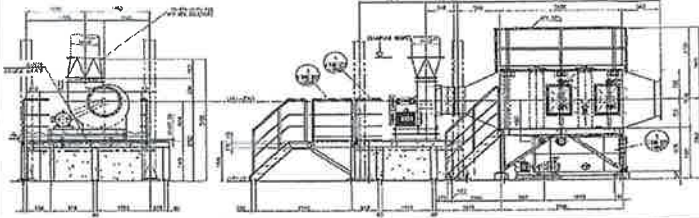
Item No.	Equipment	posco TCS		POSCO CGL CENTER-2 SPM FUME SCRUBBER		Date :	09 / 01 / 25																																	
5.4.5						Rev No.	01																																	
								Page: 01																																
						<table><tr><th colspan="4">FAN SPECIFICATION</th></tr><tr><td>CAPACITY</td><td>500 CMH</td><td>REVOLUTION</td><td>1800 RPM</td></tr><tr><td>STATIC PRESSURE</td><td>200 mmAq</td><td>TEMP.</td><td>20°C</td></tr><tr><td>MOTOR</td><td colspan="3">30KW 4P 3ø 50Hz 380V AC MOTOR</td></tr></table> <table><tr><th colspan="4">PUMP SPECIFICATION</th></tr><tr><td>CAPACITY</td><td>0.9 CMH</td><td>REVOLUTION</td><td>1780 RPM</td></tr><tr><td>HEAD</td><td>20mH</td><td>NOZZLES</td><td>60X65A</td></tr><tr><td>MOTOR</td><td colspan="3">5.5KW 4P 3ø 50Hz 380V AC MOTOR</td></tr></table>			FAN SPECIFICATION				CAPACITY	500 CMH	REVOLUTION	1800 RPM	STATIC PRESSURE	200 mmAq	TEMP.	20°C	MOTOR	30KW 4P 3ø 50Hz 380V AC MOTOR			PUMP SPECIFICATION				CAPACITY	0.9 CMH	REVOLUTION	1780 RPM	HEAD	20mH	NOZZLES	60X65A	MOTOR	5.5KW 4P 3ø 50Hz 380V AC MOTOR		
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No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark																															
						Min	Max																																	
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	2.21 mm/s																																
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	39																																
			No abnormal sound	Sound rod	Once/week	0	X	0																																
		V-belt	Grease status	Visually	Once/week	0	X	0																																
			No abnormal sound	Sound rod	Once/week	0	X	0																																
			Loss tension in belt	Visually	Once/week	0	X	0																																
		Valve	Leak solution	Visually	Once/week	0	X	0																																
			Handle normal operation	Visually	Once/week	0	X	0																																
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0																																
			Grease status	Visually	Once/week	0	X	0																																
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0																																
			Leak solution	Visually	Once/week	0	X	0																																
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0																																
			Leak solution	Visually	Once/month	0	X	0																																
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0																																
			Leak solution	Visually	Once/month	0	X	0																																
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0																																
			Nozzle spray flow	Visually	Once/6month	0	X	0																																
			Leak solution	Visually	Once/month	0	X	0																																
		Septic tank	Water level	Visually	Once/week	50%	80%	80 %																																
			Leak solution	Visually	Once/month	0	X	0																																
			Leak solution	Visually	Once/week	0	X	0																																
		Pump	Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	0.75 mm/s																																
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-																																

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Item No.	Equipment	posco TCS		POSCO CGL CENTER-2 SPM FUME SCRUBBER		Date :	15/01/25																																
5.4.5						Rev No.	01																																
Page: 01																																							
				<table><tr><th colspan="4">FAN SPECIFICATION</th></tr><tr><td>CAPACITY</td><td>500 CMH</td><td>REVOLUTION</td><td>1800 RPM</td></tr><tr><td>STATIC PRESSURE</td><td>200 mmAq</td><td>TEMP.</td><td>20°C</td></tr><tr><td>MOTOR</td><td colspan="3">30KW 4P 3ø 50Hz 380V AC MOTOR</td></tr></table> <table><tr><th colspan="4">PUMP SPECIFICATION</th></tr><tr><td>CAPACITY</td><td>0.9 CMH</td><td>REVOLUTION</td><td>1780 RPM</td></tr><tr><td>HEAD</td><td>20mH</td><td>NOZZLES</td><td>60X65A</td></tr><tr><td>MOTOR</td><td colspan="3">5.5KW 4P 3ø 50Hz 380V AC MOTOR</td></tr></table>				FAN SPECIFICATION				CAPACITY	500 CMH	REVOLUTION	1800 RPM	STATIC PRESSURE	200 mmAq	TEMP.	20°C	MOTOR	30KW 4P 3ø 50Hz 380V AC MOTOR			PUMP SPECIFICATION				CAPACITY	0.9 CMH	REVOLUTION	1780 RPM	HEAD	20mH	NOZZLES	60X65A	MOTOR	5.5KW 4P 3ø 50Hz 380V AC MOTOR		
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* CHECK ITEMS AND MEASUREMENT VALUE																																							
No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark																														
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	2.55 mm/s																															
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	38																															
			No abnormal sound	Sound rod	Once/week	0	X	0																															
		V-belt	Grease status	Visually	Once/week	0	X	0																															
			No abnormal sound	Sound rod	Once/week	0	X	0																															
			Loss tension in belt	Visually	Once/week	0	X	0																															
		Valve	Leak solution	Visually	Once/week	0	X	0																															
			Handle normal operation	Visually	Once/week	0	X	0																															
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0																															
			Grease status	Visually	Once/week	0	X	0																															
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0																															
			Leak solution	Visually	Once/week	0	X	0																															
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0																															
			Leak solution	Visually	Once/month	0	X	0																															
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0																															
			Leak solution	Visually	Once/month	0	X	0																															
			Waste stale(Demister)	Visually	Once/6month	0	X	0																															
		Tank	Nozzle spray flow	Visually	Once/6month	0	X	0																															
			Leak solution	Visually	Once/month	0	X	0																															
			Water level	Visually	Once/week	50%	80%	80 %																															
		Septic tank	Leak solution	Visually	Once/month	0	X	0																															
			Leak solution	Visually	Once/week	0	X	0																															
		Pump	Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.6 mm/s																															
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-																															

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Item No. 5.4.5	Equipment posco TCS	POSCO CGL CENTER-2 SPM FUME SCRUBBER				Date : 22/01/25	
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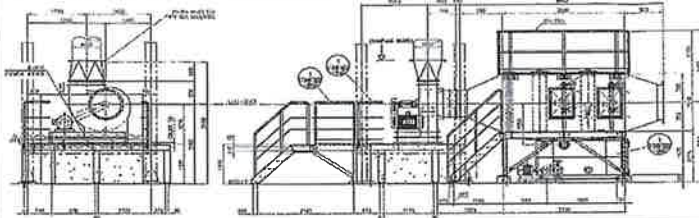
FAN SPECIFICATION			
CAPACITY	500 CMH	REVOLUTION	1800 RPM
STATIC PRESSURE	200 mmAq	TEMP.	20°C
MOTOR	30KW 4P 3ø 50Hz 380V AC MOTOR		

PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR	5.5KW 4P 3ø 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	1.22 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	40	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	60%	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Leak solution	Visually	Once/week	0	X	0	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	0.92 mm/s	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

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Item No. 5.4.5	Equipment posco TCS	POSCO CGL CENTER-2 SPM FUME SCRUBBER				Date : 7/2/25	
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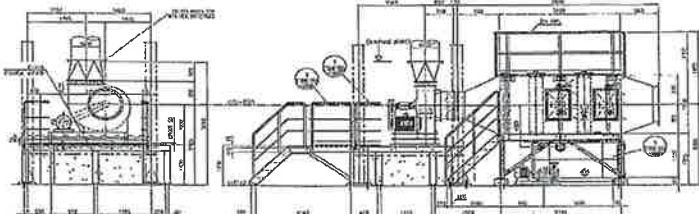
FAN SPECIFICATION			
CAPACITY	500 CMH	REVOLUTION	1800 RPM
STATIC PRESSURE	200 mmAq	TEMP.	20°C
MOTOR	30KW 4P 3ø 50Hz 380V AC MOTOR		

PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR	5.5KW 4P 3ø 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control Items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	2.19 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	58.8°C	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	60%	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Leak solution	Visually	Once/week	0	X	0	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	0.71 mm/s	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

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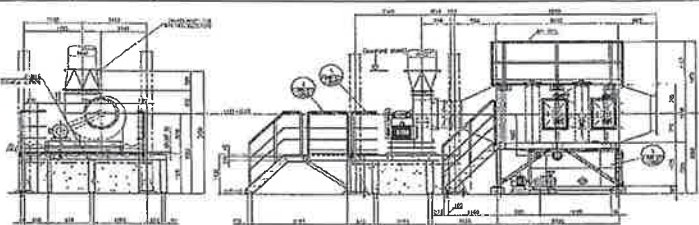
CAPACITY	500 CMM	REVOLUTION	1800 RPM
STATIC PRESSURE	200 mmAq	TEMP.	20°C
MOTOR	30KW 4P 3ø 50Hz 380V AC MOTOR		

CAPACITY	0.9 CMM	REVOLUTION	1700 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR	5.5KW 4P 3ø 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control Items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	2.28 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	56.3	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		V-belt	No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80%	
Leak solution	Visually		Once/month	0	X	0			
Pump	Leak solution	Visually	Once/week	0	X	0			
	Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	3.31 mm/s			
	Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-			

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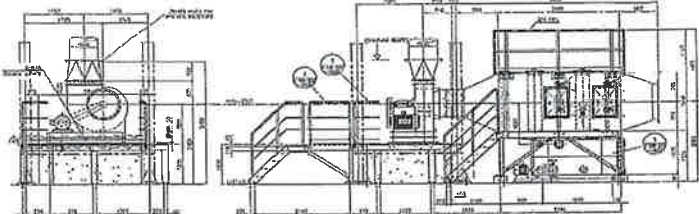
CAPACITY	500 CMM	REVOLUTION	1800 RPM
STATIC PRESSURE	200 mmAq	TEMP.	20°C
MOTOR	30KW 4P 3ø 50Hz 380V AC MOTOR		

CAPACITY	0.9 CMM	REVOLUTION	1700 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR	5.5KW 4P 3ø 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control Items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	2.63 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	52.6	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		V-belt	No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80%	
Leak solution	Visually		Once/month	0	X	0			
Pump	Leak solution	Visually	Once/week	0	X	0			
	Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	3.96 mm/s			
	Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-			

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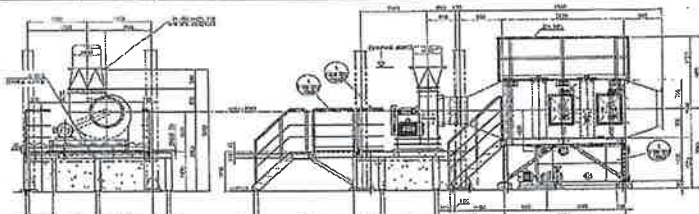
FAN SPECIFICATION			
CAPACITY	500 CMM	REVOLUTION	1800 RPM
STATIC PRESSURE	200 mmAq	TEMP.	20°C
MOTOR	30KW 4P 3φ 50Hz 380V AC MOTOR		

PUMP SPECIFICATION			
CAPACITY	0.9 CMM	REVOLUTION	1700 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR	5.5KW 4P 3φ 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	2.46 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	56.3	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	70	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Leak solution	Visually	Once/week	0	X	0	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	0.89 mm/s	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

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Item No.	Equipment	posco TCS		POSCO CGL CENTER-2 SPM FUME SCRUBBER	Date : 14/5/25
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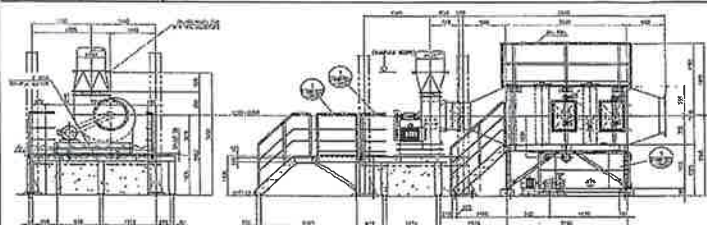
FAN SPECIFICATION			
CAPACITY	500 CMM	REVOLUTION	1800 RPM
STATIC PRESSURE	200 mmAq	TEMP.	20°C
MOTOR	30KW 4P 3φ 50Hz 380V AC MOTOR		

PUMP SPECIFICATION			
CAPACITY	0.9 CMM	REVOLUTION	1700 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR	5.5KW 4P 3φ 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	2.65 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	54.9	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	70	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Leak solution	Visually	Once/week	0	X	0	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.06 mm/s	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

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Item No.	Equipment	posco TCS		POSCO CGL CENTER-2 SPM FUME SCRUBBER		Date : 21/7/25	
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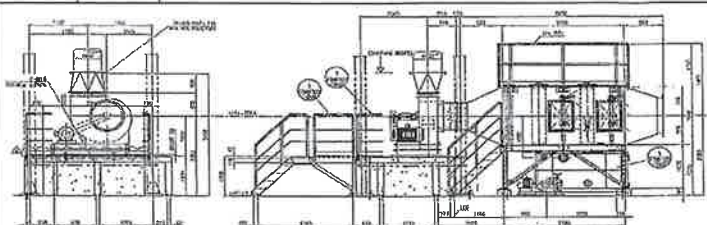
CAPACITY	500 CMM	REVOLUTION	1800 RPM
STATIC PRESSURE	200 mmHg	TEMP.	20°C
MOTOR	30KW 4P 3# 50Hz 380V AC MOTOR		

CAPACITY	0.9 CMM	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR	5.5KW 4P 3# 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	2.53 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	56.6	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		V-belt	No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
		Septic tank	Leak solution	Visually	Once/month	0	X	0	
			Water level	Visually	Once/week	50%	80%	80	
Pump	Leak solution	Visually	Once/month	0	X	0			
	Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	0.91 mm/s			
	Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-			

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Item No.	Equipment	posco TCS		POSCO CGL CENTER-2 SPM FUME SCRUBBER		Date : 28/3/25	
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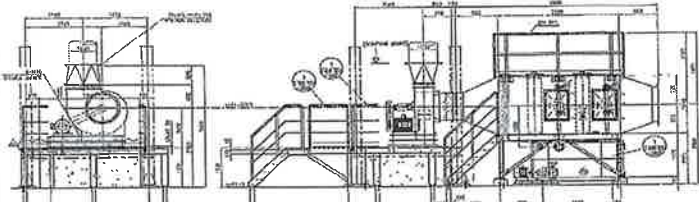
CAPACITY	500 CMM	REVOLUTION	1800 RPM
STATIC PRESSURE	200 mmHg	TEMP.	20°C
MOTOR	30KW 4P 3# 50Hz 380V AC MOTOR		

CAPACITY	0.9 CMM	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR	5.5KW 4P 3# 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	3.1 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	50.6	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		V-belt	No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
		Septic tank	Leak solution	Visually	Once/month	0	X	0	
			Water level	Visually	Once/week	50%	80%	80	
Pump	Leak solution	Visually	Once/month	0	X	0			
	Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.09 mm/s			
	Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-			

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FAN SPECIFICATION

CAPACITY	500 CMU	REVOLUTION	1800 RPM
STATIC PRESSURE	200 mmAq	TEMP.	20°C
MOTOR	30KW 4P 3φ 50Hz 380V AC MOTOR		

PUMP SPECIFICATION

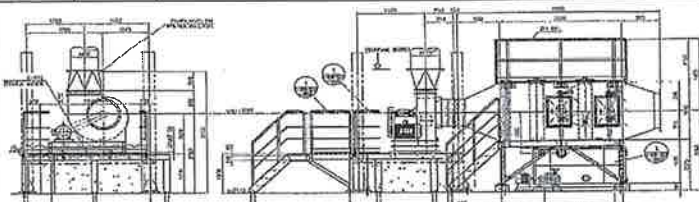
CAPACITY	0.9 CMU	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR	5.5KW 4P 3φ 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE

No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	2.38 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	57.1 C	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80 %	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Leak solution	Visually	Once/week	0	X	0	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.13 mm/s	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

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FAN SPECIFICATION

CAPACITY	500 CMU	REVOLUTION	1800 RPM
STATIC PRESSURE	200 mmAq	TEMP.	20°C
MOTOR	30KW 4P 3φ 50Hz 380V AC MOTOR		

PUMP SPECIFICATION

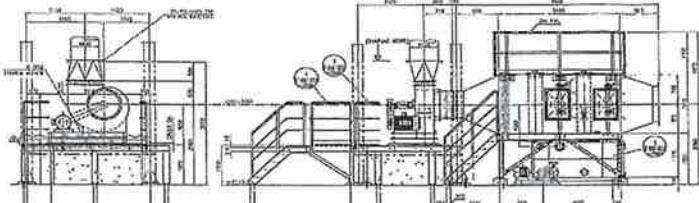
CAPACITY	0.9 CMU	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR	5.5KW 4P 3φ 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE

No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	2.10 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	55.6 C	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80 %	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Leak solution	Visually	Once/week	0	X	0	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	0.95 mm/s	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

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Item No.	Equipment	posco TCS	POSCO CGL CENTER-2 SPM FUME SCRUBBER	Date: 17/04/25
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FAN SPECIFICATION

CAPACITY	500 CMH	REVOLUTION	1800 RPM
STATIC PRESSURE	200 mmHg	TDP.	20°C
MOTOR	30KW 4P 3ø 50Hz 380V AC MOTOR		

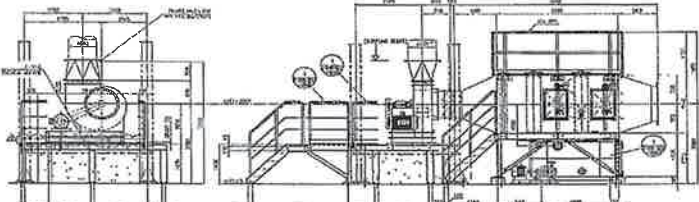
PUMP SPECIFICATION

CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR	5.5KW 4P 3ø 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control Items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	29.3 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	39.1 °C	
			No abnormal sound	Sound rod	Once/week	0	X	○	
			Grease status	Visually	Once/week	0	X	○	
		V-belt	No abnormal sound	Sound rod	Once/week	0	X	○	
			Loss tension in belt	Visually	Once/week	0	X	○	
		Valve	Leak solution	Visually	Once/week	0	X	○	
			Handle normal operation	Visually	Once/week	0	X	○	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	○	
			Grease status	Visually	Once/week	0	X	○	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	○	
			Leak solution	Visually	Once/week	0	X	○	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	○	
			Leak solution	Visually	Once/month	0	X	○	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	○	
			Leak solution	Visually	Once/month	0	X	○	
			Leak solution	Visually	Once/month	0	X	○	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	○	
			Nozzle spray flow	Visually	Once/6month	0	X	○	
			Leak solution	Visually	Once/month	0	X	○	
		Septic tank	Water level	Visually	Once/week	50%	80%	80%	
			Leak solution	Visually	Once/month	0	X	○	
		Pump	Leak solution	Visually	Once/week	0	X	○	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.93 mm/s	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

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FAN SPECIFICATION

CAPACITY	500 CMH	REVOLUTION	1800 RPM
STATIC PRESSURE	200 mmHg	TDP.	20°C
MOTOR	30KW 4P 3ø 50Hz 380V AC MOTOR		

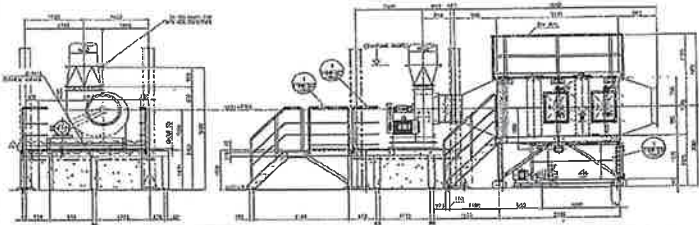
PUMP SPECIFICATION

CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR	5.5KW 4P 3ø 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control Items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	2.64 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	37.5 °C	
			No abnormal sound	Sound rod	Once/week	0	X	○	
			Grease status	Visually	Once/week	0	X	○	
		V-belt	No abnormal sound	Sound rod	Once/week	0	X	○	
			Loss tension in belt	Visually	Once/week	0	X	○	
		Valve	Leak solution	Visually	Once/week	0	X	○	
			Handle normal operation	Visually	Once/week	0	X	○	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	○	
			Grease status	Visually	Once/week	0	X	○	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	○	
			Leak solution	Visually	Once/week	0	X	○	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	○	
			Leak solution	Visually	Once/month	0	X	○	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	○	
			Leak solution	Visually	Once/month	0	X	○	
			Leak solution	Visually	Once/month	0	X	○	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	○	
			Nozzle spray flow	Visually	Once/6month	0	X	○	
			Leak solution	Visually	Once/month	0	X	○	
		Septic tank	Water level	Visually	Once/week	50%	80%	80%	
			Leak solution	Visually	Once/month	0	X	○	
		Pump	Leak solution	Visually	Once/week	0	X	○	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.14 mm/s	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

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Item No.	Equipment	posco TCS		Date : 02/05/25	
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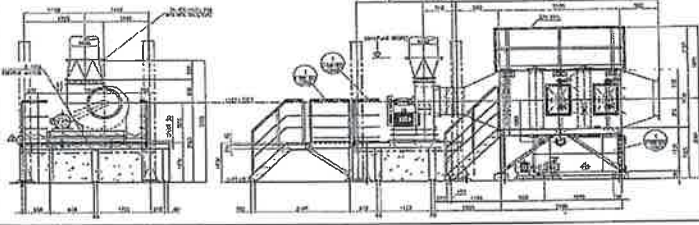
FAN SPECIFICATION			
CAPACITY	500 CMU	REVOLUTION	1900 RPM
STATIC PRESSURE	200 mmAq	TEMP.	20°C
MOTOR	30KW 4P 3# 50Hz 380V AC MOTOR		

PUMP SPECIFICATION			
CAPACITY	0.9 CMU	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR	5.5KW 4P 3# 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	2.32 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	51.0 °C	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		V-belt	No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80 %	
Leak solution	Visually		Once/month	0	X	0			
Pump	Leak solution	Visually	Once/week	0	X	0			
	Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.27 mm/s			
	Coupling alignment	Dial gauge	Once/year	0	0.5 mm				

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Item No.	Equipment	posco TCS		Date : 09/05/25	
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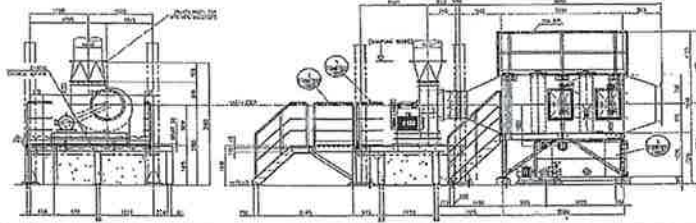
FAN SPECIFICATION			
CAPACITY	500 CMU	REVOLUTION	1800 RPM
STATIC PRESSURE	200 mmAq	TEMP.	20°C
MOTOR	30KW 4P 3# 50Hz 380V AC MOTOR		

PUMP SPECIFICATION			
CAPACITY	0.9 CMU	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR	5.5KW 4P 3# 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	1.53 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	60.2 °C	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		V-belt	No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80 %	
Leak solution	Visually		Once/month	0	X	0			
Pump	Leak solution	Visually	Once/week	0	X	0			
	Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.59 mm/s			
	Coupling alignment	Dial gauge	Once/year	0	0.5 mm				

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FAN SPECIFICATION			
CAPACITY	500 CMH	REVOLUTION	1800 RPM
STATIC PRESSURE	200 mmAq	TEMP.	20°C
MOTOR	30KW 4P 3ø 50Hz 380V AC MOTOR		

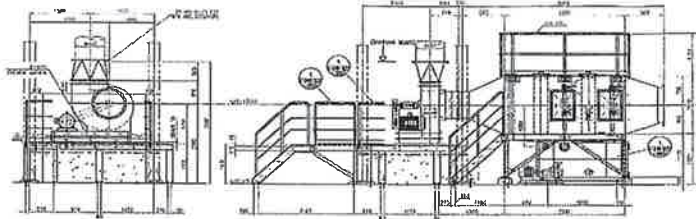
PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR	5.5KW 4P 3ø 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE

No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	1.13 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	58.3 °C	
			No abnormal sound	Sound rod	Once/week	0	X	○	
			Grease status	Visually	Once/week	0	X	○	
		V-belt	No abnormal sound	Sound rod	Once/week	0	X	○	
			Loss tension in belt	Visually	Once/week	0	X	○	
		Valve	Leak solution	Visually	Once/week	0	X	○	
			Handle normal operation	Visually	Once/week	0	X	○	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	○	
			Grease status	Visually	Once/week	0	X	○	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	○	
			Leak solution	Visually	Once/week	0	X	○	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	○	
			Leak solution	Visually	Once/month	0	X	○	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	○	
			Leak solution	Visually	Once/month	0	X	○	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	○	
			Nozzle spray flow	Visually	Once/6month	0	X	○	
			Leak solution	Visually	Once/month	0	X	○	
		Septic tank	Water level	Visually	Once/week	50%	80%	80%	
			Leak solution	Visually	Once/month	0	X	○	
		Pump	Leak solution	Visually	Once/week	0	X	○	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.47 mm/s	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

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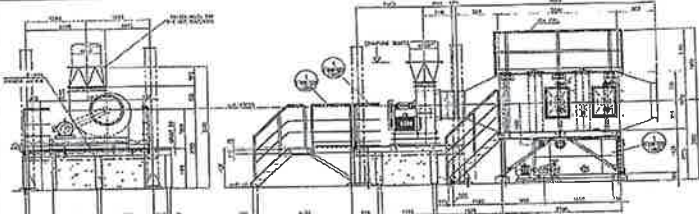
FAN SPECIFICATION			
CAPACITY	500 CMH	REVOLUTION	1800 RPM
STATIC PRESSURE	200 mmAq	TEMP.	20°C
MOTOR	30KW 4P 3ø 50Hz 380V AC MOTOR		

PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR	5.5KW 4P 3ø 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE

No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	2.07 mm/s	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	49.2 °C	
			No abnormal sound	Sound rod	Once/week	0	X	○	
			Grease status	Visually	Once/week	0	X	○	
		V-belt	No abnormal sound	Sound rod	Once/week	0	X	○	
			Loss tension in belt	Visually	Once/week	0	X	○	
		Valve	Leak solution	Visually	Once/week	0	X	○	
			Handle normal operation	Visually	Once/week	0	X	○	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	○	
			Grease status	Visually	Once/week	0	X	○	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	○	
			Leak solution	Visually	Once/week	0	X	○	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	○	
			Leak solution	Visually	Once/month	0	X	○	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	○	
			Leak solution	Visually	Once/month	0	X	○	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	○	
			Nozzle spray flow	Visually	Once/6month	0	X	○	
			Leak solution	Visually	Once/month	0	X	○	
		Septic tank	Water level	Visually	Once/week	50%	80%	80%	
			Leak solution	Visually	Once/month	0	X	○	
		Pump	Leak solution	Visually	Once/week	0	X	○	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.56	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

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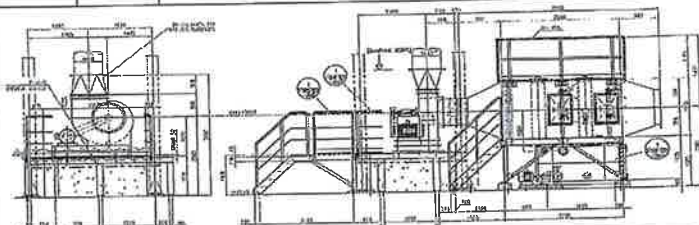


FAN SPECIFICATION			
CAPACITY	500 CMH	REVOLUTION	1800 RPM
STATIC PRESSURE	200 mmHq	TEMP.	20°C
MOTOR 30KW 4P 3ø 50Hz 380V AC MOTOR			

PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR 5.5KW 4P 3ø 50Hz 380V AC MOTOR			

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	2.04	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	51.5 °C	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80%	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Leak solution	Visually	Once/week	0	X	0	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.65	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

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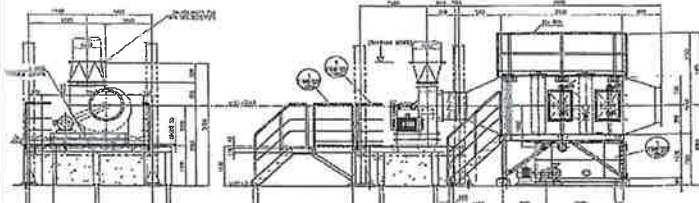


FAN SPECIFICATION			
CAPACITY	500 CMH	REVOLUTION	1800 RPM
STATIC PRESSURE	200 mmHq	TEMP.	20°C
MOTOR 30KW 4P 3ø 50Hz 380V AC MOTOR			

PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR 5.5KW 4P 3ø 50Hz 380V AC MOTOR			

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control Items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	2.11	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	51.7 °C	
			No abnormal sound	Sound rod	Once/week	0	X	0	
		V-belt	Grease status	Visually	Once/week	0	X	0	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80%	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Leak solution	Visually	Once/week	0	X	0	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.71	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

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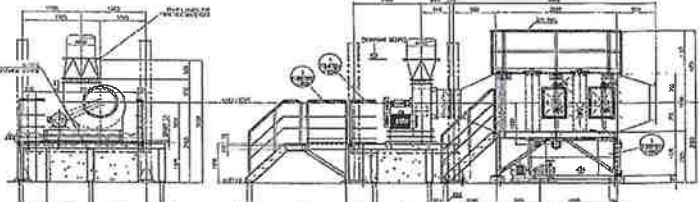
FAN SPECIFICATION			
CAPACITY	500 CMH	REVOLUTION	1800 RPM
STATIC PRESSURE	200 mmAq	TEMP.	20°C
MOTOR	30KW 4P 3ø 50Hz 380V AC MOTOR		

PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR	5.5KW 4P 3ø 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control Items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	2.15	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	52.9	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		V-belt	No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80%	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Leak solution	Visually	Once/week	0	X	0	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.68	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

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FAN SPECIFICATION			
CAPACITY	500 CMH	REVOLUTION	1800 RPM
STATIC PRESSURE	200 mmAq	TEMP.	20°C
MOTOR	30KW 4P 3ø 50Hz 380V AC MOTOR		

PUMP SPECIFICATION			
CAPACITY	0.9 CMH	REVOLUTION	1780 RPM
HEAD	20mH	NOZZLES	80X65A
MOTOR	5.5KW 4P 3ø 50Hz 380V AC MOTOR		

* CHECK ITEMS AND MEASUREMENT VALUE									
No.	Equipment	Control Items	Management criteria	Inspect method	Meas. Cycle	Control Range		Check	Remark
						Min	Max		
1	Fume Scrubber	Blower	Vibration	Vibration Meter	Once/week	0 mm./sec	8 mm./sec	2.14	
			Temperature of bearing	Temp gun	Once/week	30°C	65°C	52.9	
			No abnormal sound	Sound rod	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		V-belt	No abnormal sound	Sound rod	Once/week	0	X	0	
			Loss tension in belt	Visually	Once/week	0	X	0	
		Valve	Leak solution	Visually	Once/week	0	X	0	
			Handle normal operation	Visually	Once/week	0	X	0	
		Manual Damper	Handle normal operation	Visually	Once/week	0	X	0	
			Grease status	Visually	Once/week	0	X	0	
		Soft Canvas	Tear on rubber	Visually	Once/week	0	X	0	
			Leak solution	Visually	Once/week	0	X	0	
		Man hole (Top)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Man hole (Side)	Crack on seal	Visually	Once/month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Tank	Waste stale(Demister)	Visually	Once/6month	0	X	0	
			Nozzle spray flow	Visually	Once/6month	0	X	0	
			Leak solution	Visually	Once/month	0	X	0	
		Septic tank	Water level	Visually	Once/week	50%	80%	80%	
			Leak solution	Visually	Once/month	0	X	0	
		Pump	Leak solution	Visually	Once/week	0	X	0	
			Vibration	Vibration Meter	Once/week	0 mm./sec	5mm./sec	1.59	
			Coupling alignment	Dial gauge	Once/year	0	0.5 mm	-	

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ภาคผนวก ข.2-8

เอกสารชี้แจงการจ่ายไฟฟ้าสำรองให้ระบบ Scrubber
เมื่อเกิดเหตุการณ์กระแสไฟฟ้าดับหรือขัดข้อง

รายงานชี้แจงเพิ่มเติม (ครั้งที่ 1)
การเปลี่ยนแปลงรายละเอียดโครงการ
ในรายงานการวิเคราะห์ผลกระทบสิ่งแวดล้อม (ครั้งที่ 2)
โครงการโรงงานผลิตเหล็กแผ่นเคลือบสังกะสี
ของบริษัท โฟสโค โค้ทเต็ด สตีล (ประเทศไทย) จำกัด
ตั้งอยู่ที่ นิคมอุตสาหกรรมอมตะซิตี้ ตำบลนาบข่างพร อำเภอปลวกแดง จังหวัดระยอง

1. ผลการปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อม และมาตรการติดตามตรวจสอบผลกระทบสิ่งแวดล้อม
- 1.1 จากความเห็นต่อรายงานผลการปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อมและมาตรการติดตามตรวจสอบผลกระทบสิ่งแวดล้อมโครงการโรงงานผลิตเหล็กแผ่นเคลือบสังกะสี ของบริษัท โฟสโค โค้ทเต็ด สตีล (ประเทศไทย) จำกัดฉบับประจำเดือนกรกฎาคม-ธันวาคม 2559 ของสำนักงานนโยบายฯ ตามหนังสือที่ ทส 1016.5/56 ลงวันที่ 11 มกราคม 2561 ให้ชี้แจงกรณีที่ไม่ได้ปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อม และมาตรการติดตามตรวจสอบผลกระทบสิ่งแวดล้อม เช่น
 - 1.1.1 ติดตั้งเครื่องกำเนิดไฟฟ้าสำรอง (Emergency Generator) ขนาด 1,800 กิโลวัตต์ แอมแปร์ จำนวน 1 ชุด ซึ่งสามารถจ่ายไฟฟ้าสำรองให้ระบบ Scrubber ซึ่งหากเกิดเหตุการณ์ไฟฟ้าดับหรือขัดข้อง โครงการสามารถเดินเครื่องกำเนิดไฟฟ้าสำรองดังกล่าวได้ภายในระยะเวลา 16 วินาที และสามารถทำการผลิตไฟฟ้าสำรองได้ประมาณ 18 ชั่วโมง อย่างไรก็ตาม โครงการได้ชี้แจงว่า โครงการไม่มีการติดตั้งเครื่องกำเนิดไฟฟ้าสำรองดังกล่าวเนื่องจากเมื่อเกิดเหตุการณ์กระแสไฟฟ้าขัดข้อง โครงการจะหยุดกระบวนการผลิตทันที ทำให้ไม่มีการปล่อยมลพิษและไอระเหยไปสู่ระบบ Scrubber และสิ่งแวดล้อมภายนอก

คำชี้แจง จากการดำเนินการของโครงการที่ผ่านมา พบว่ายังไม่เคยเกิดเหตุไฟฟ้าขัดข้อง/ไฟฟ้าดับจนส่งผลกระทบต่อกระบวนการผลิตของโครงการแต่อย่างใด โดยโครงการมีการดำเนินการป้องกันกรณีการปลดปล่อยสารมลพิษทางอากาศจากระบบบำบัดมลพิษอากาศ (Scrubber) ในเหตุการณ์ไฟฟ้าดับหรือขัดข้องโดยกำหนดขั้นตอนการปฏิบัติงาน (WI) เพื่อการป้องกันอุบัติเหตุและปฏิบัติงานอย่างราบรื่นในระหว่างที่ไฟฟ้าดับ (ภาคผนวก ก-1)

สำหรับการติดตั้งเครื่องกำเนิดไฟฟ้าสำรองเพื่อใช้ในกรณีเกิดเหตุไฟฟ้าดับนั้น เนื่องจากกระบวนการผลิตส่วนใหญ่ของโครงการใช้กระแสไฟฟ้าเป็นพลังงานหลักในการเดินเครื่องจักร หากเกิดเหตุการณ์ไฟฟ้าดับจะทำให้กระบวนการผลิตทั้งหมดหยุดลง ซึ่งกรณีดังกล่าวจะส่งผลให้อุปกรณ์และเครื่องจักรบางตัวเกิดความเสียหายได้ กล่าวคือ สังกะสีที่หลอมเหลวอยู่จำนวน 3 ปอนด์ จะเกิดการแข็งตัวกลายเป็นของแข็ง ลูกกลิ้ง (Roll) ที่อยู่ในเตาอบจะเกิดการเสียรูป ส่งผลให้วัตถุดิบที่ค้างอยู่ภายในเตาอบขณะไฟฟ้าดับจะไม่สามารถผลิตเป็นสินค้าได้ในส่วนผลกระทบด้านมลสารทางอากาศที่เกิดขึ้นนั้น เนื่องจากไฟฟ้าดับทำให้กระบวนการผลิตทั้งหมดหยุดลง จึงไม่มีแหล่งกำเนิดมลสารทางอากาศในช่วงเวลาดังกล่าว มลสารทางอากาศที่เกิดขึ้นก่อนไฟฟ้าจะดับนั้น จะถูกระบบรวบรวมอากาศดูดออกไปด้วย Blower (เมื่อไฟฟ้าดับ Blower ยังคงหมุนอยู่ด้วยแรงเฉื่อย) และโดยมลสารส่วนที่ดูดออกไปจะถูกกักเก็บไว้ในหอรวบรวมอากาศ โดยไม่มีการระบายออกภายนอก จากเหตุผลข้างต้นพบว่า 3 จุด ที่โครงการไม่สามารถหยุดการทำงานได้ เนื่องจากจะทำให้เกิดความเสียหายต่อการดำเนินการของโครงการเป็นอย่างมาก ได้แก่ บริเวณปล่อยหลอมสังกะสี จำนวน 3 ปอนด์ บริเวณลูกกลิ้ง (Roll) ที่อยู่ในเตาอบจำนวน 8 ลูก และระบบควบคุมหลักของโครงการ (Main Control System)

ทางโครงการจึงพิจารณาติดตั้งเครื่องกำเนิดไฟฟ้าสำรองจำนวน 2 เครื่อง บริเวณสายการผลิต โดยเครื่องกำเนิดไฟฟ้าสำรองเครื่องที่ 1 ทำหน้าที่จ่ายไฟฟ้าให้กับปล่อยหลอมสังกะสี จำนวน 3 ปอนด์ ระบายไอเสียภายในหัวเผาเตาอบ และลูกกลิ้ง (Roll) ที่อยู่ภายในเตาอบจำนวน 8 ลูก และเครื่องกำเนิดไฟฟ้าสำรองเครื่องที่ 2 ใช้เพื่อจ่ายไฟฟ้าให้กับระบบควบคุมหลักของโครงการ โดยเมื่อเกิดเหตุการณ์ไฟฟ้าดับโครงการสามารถเดินเครื่องกำเนิดไฟฟ้าสำรองได้ภายใน 1 นาที และสามารถเดินเครื่องต่อไปจนกว่าจะสามารถแก้ไขสถานการณ์ได้ ทั้งนี้โครงการมีปริมาณน้ำมันสำรองเพื่อใช้ในการเดินเครื่องกำเนิดไฟฟ้าได้สูงสุด 20 ชั่วโมง และสามารถจัดหาเพิ่มเติมกรณีไม่สามารถแก้ไขสถานการณ์จนเข้าสู่ภาวะปกติได้ภายในระยะเวลาดังกล่าว เพื่อให้สามารถป้องกันกระแสไฟฟ้าให้กับทั้ง 3 จุด ข้างต้นได้ เมื่อมีการจ่ายกระแสไฟฟ้าได้ตามปกติ โครงการจึงจะเตรียมการเริ่มกระบวนการผลิตอีกครั้ง และมลสารทางอากาศที่ถูกกักไว้ในหอรวบรวมอากาศ จะถูก Blower ของระบบบำบัดมลพิษทางอากาศดูดเข้าสู่ระบบบำบัดเพื่อทำการบำบัดก่อนปล่อยออกสู่ภายนอกต่อไป ดังนั้นโครงการจึงพิจารณาไม่ติดตั้งเครื่องกำเนิดไฟฟ้าสำรอง (Emergency Generator) ขนาด 1,800 กิโลวัตต์แอมแปร์ บริเวณระบบ Scrubber ตามที่ระบุไว้ในมาตรการฯ

ทั้งนี้ได้ทำการปรับปรุงการนำเสนอผลการปฏิบัติตามมาตรการฯ ใหม่ แสดงไว้ในตารางที่ 1.2.7-1 สรุปผลการปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อม (ช่วงดำเนินการ) ในคำชี้แจงหัวข้อ 1.2.7 ของรายงานฯ ฉบับนี้เรียบร้อยแล้ว

posco TCS	Work Instruction	Work	Enforcement Date :	Page :1/13
	Level 2	Outline	2016/10/31 WI-MDE-029	Rev. : 00
Emergency Blackout Work Plan (แผนฉุกเฉินไฟฟ้าดับ)				

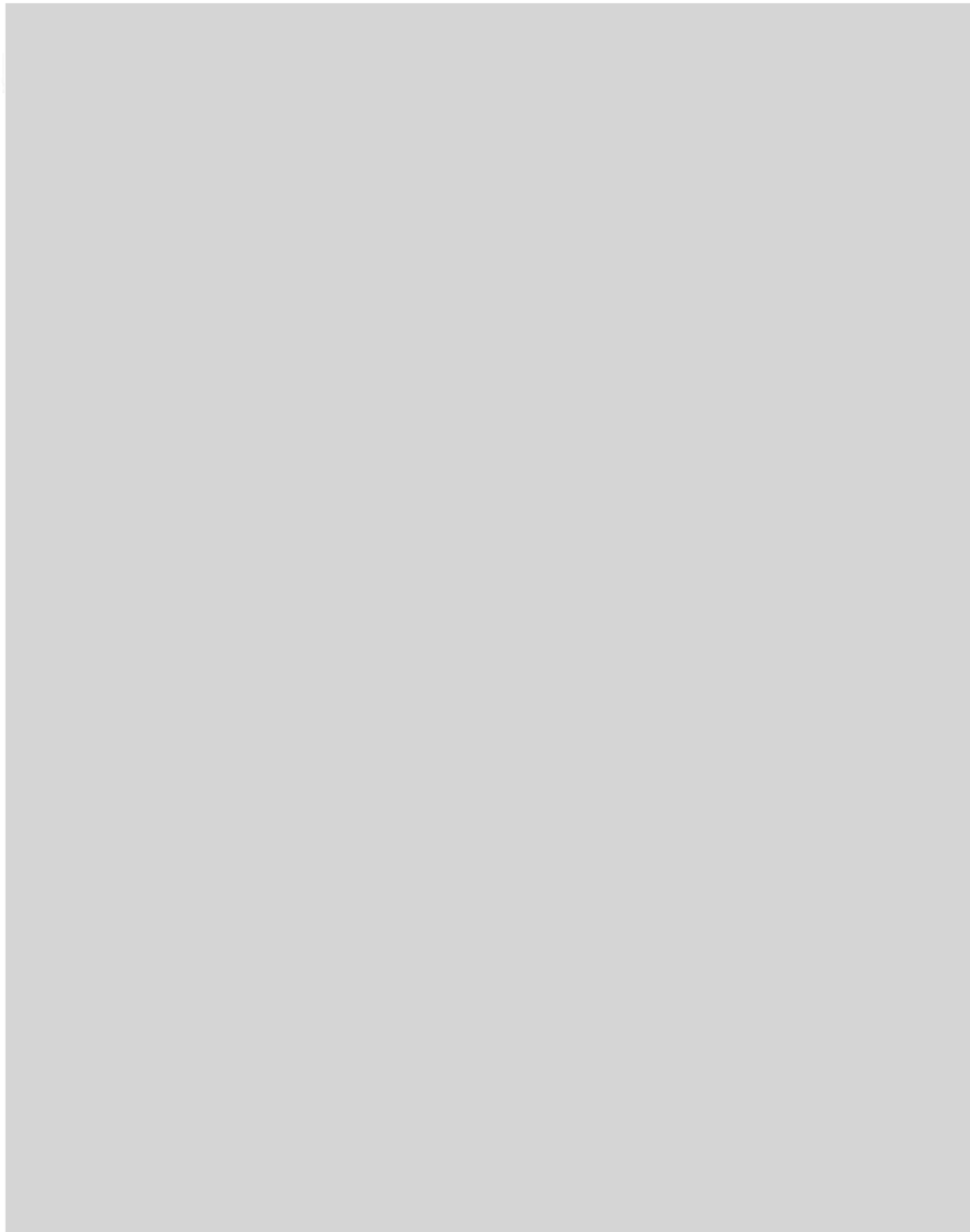
Prepared By:	Approved By:	Approved By:	Released By:
Witchaya Srisawat	Chatchawan Kiriwan	UN-YONG SON	Pimchanok Jakkaw

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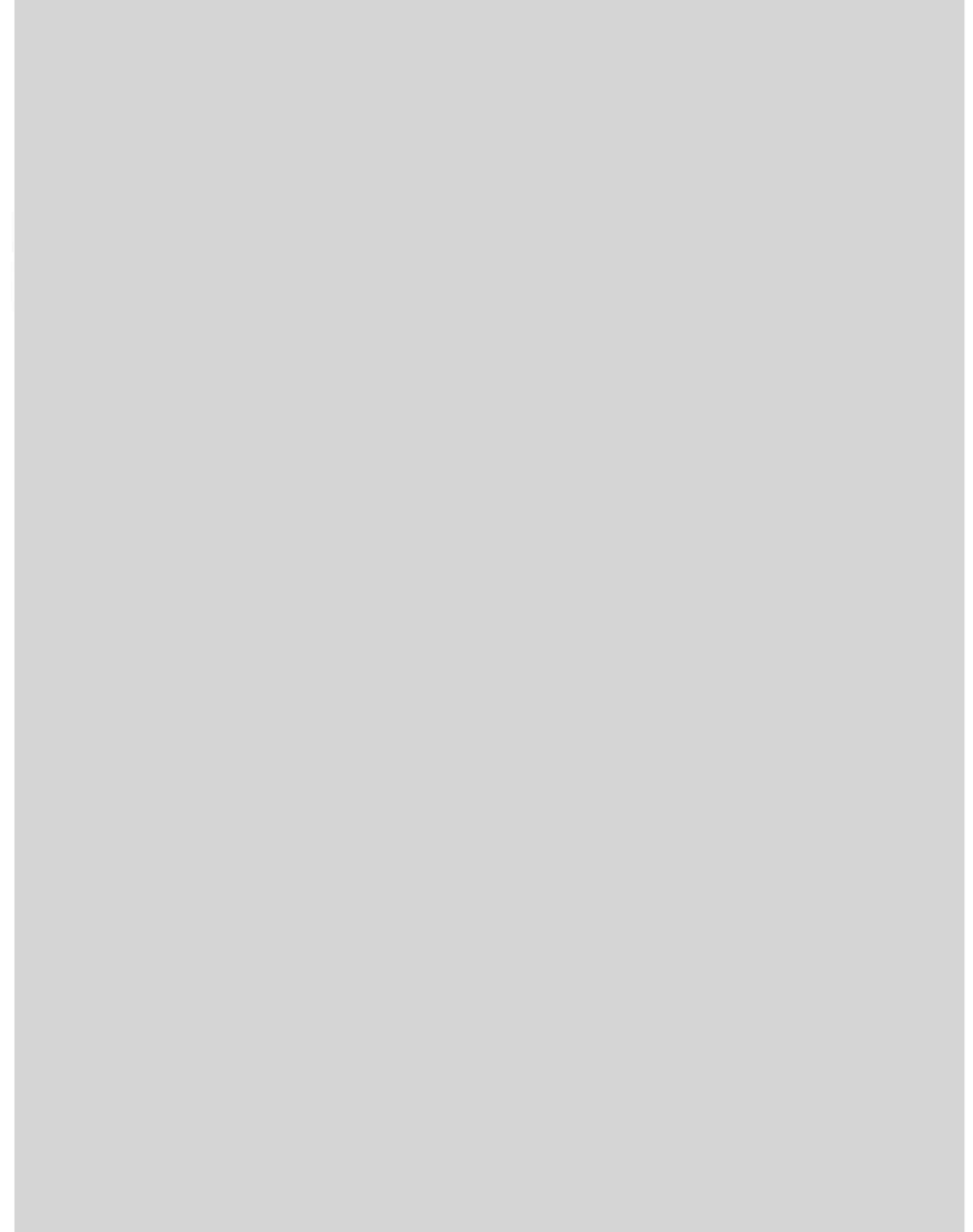
posco TCS	Work Instruction	Work	Enforcement Date :	Page :2/13
	Level 2	Outline	2016/10/31 WI-MDE-029	Rev. : 00
Emergency Blackout Work Plan (แผนฉุกเฉินไฟฟ้าดับ)				

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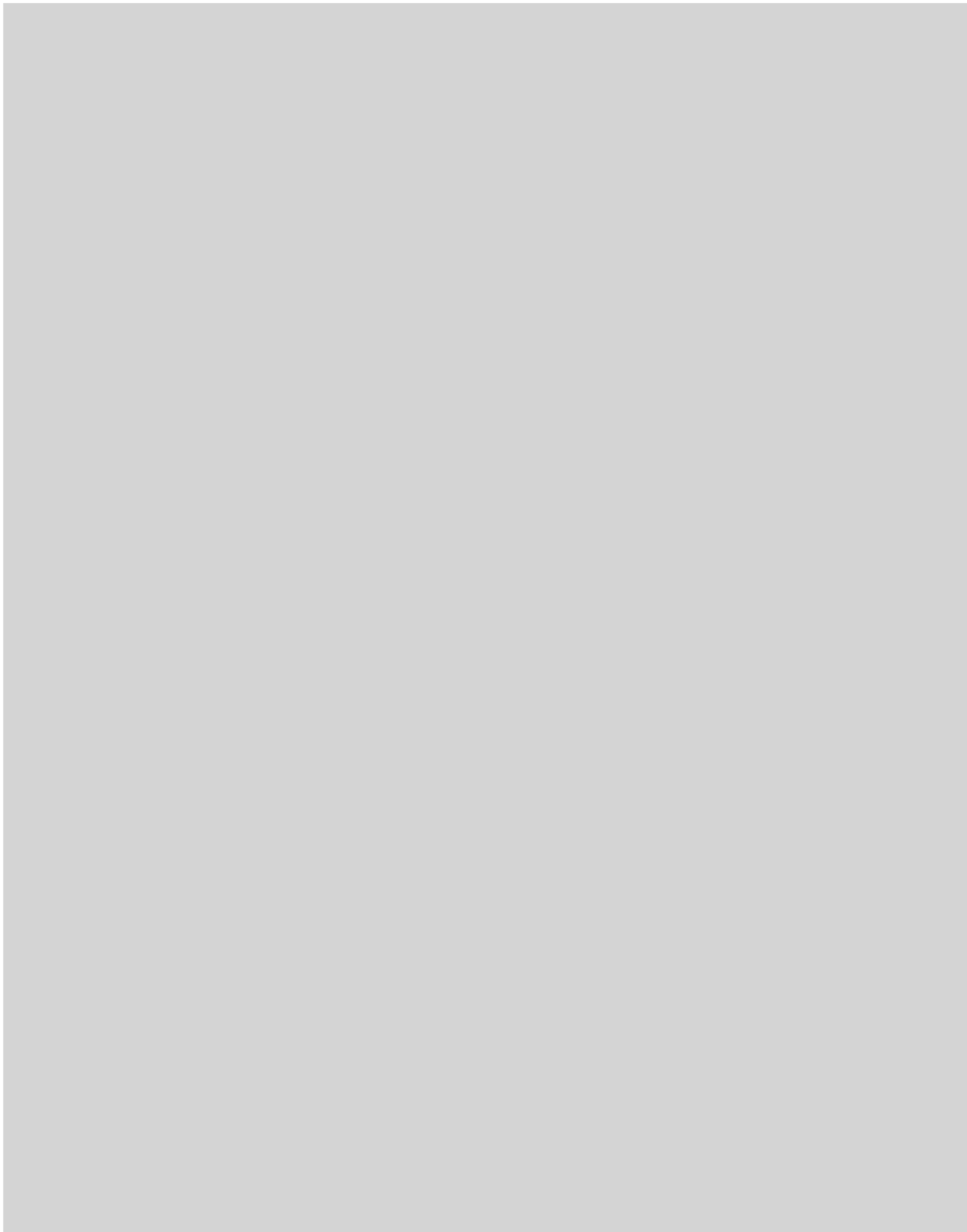
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	Emergency Blackout Work Plan (แผนฉุกเฉินไฟฟ้าดับ)	Outline	WI-MDE-029	Rev. : 00
Level 2				



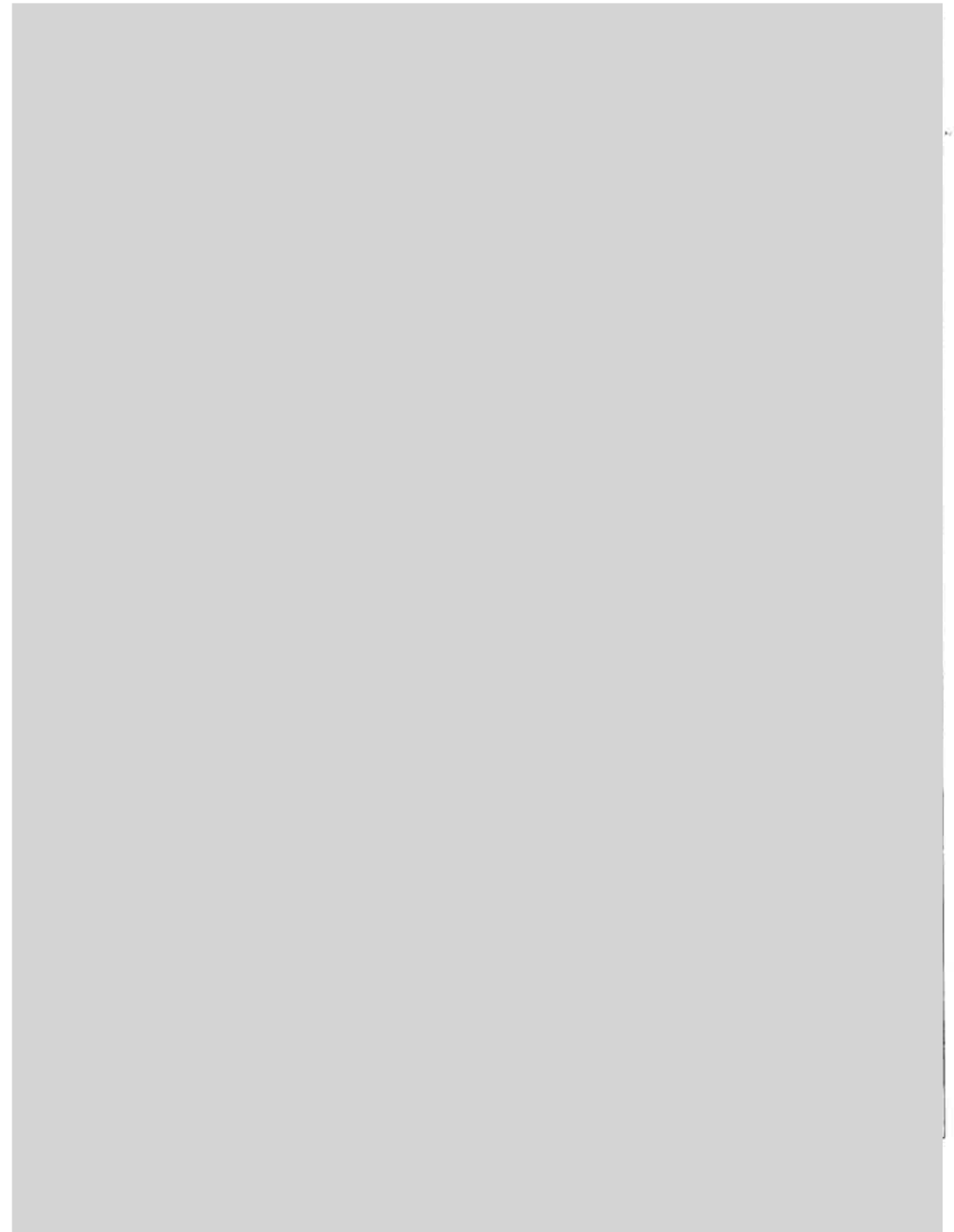
posco TCS	Work Instruction	Work	Enforcement Date : 2016/10/31	Page :4/13
	Emergency Blackout Work Plan (แผนฉุกเฉินไฟฟ้าดับ)	Outline	WI-MDE-029	Rev. : 00
Level 2				



posco TCS	Work Instruction	Work	Enforcement Date : 2016/10/31	Page :5/13
Level 2	Emergency Blackout Work Plan (แผนฉุกเฉินไฟฟ้าดับ)	Outline	WI-MDE-029	Rev. : 00



posco TCS	Work Instruction	Work	Enforcement Date : 2016/10/31	Page :6/13
Level 2	Emergency Blackout Work Plan (แผนฉุกเฉินไฟฟ้าดับ)	Outline	WI-MDE-029	Rev. : 00



posco TCS	Work Instruction	Work	Enforcement Date : 2016/10/31	Page :7/13
	Level 2	Outline	WI-MDE-029	Rev. : 00
Emergency Blackout Work Plan (แผนฉุกเฉินไฟฟ้าดับ)				

posco TCS	Work Instruction	Work	Enforcement Date : 2016/10/31	Page :8/13
	Level 2	Outline	WI-MDE-029	Rev. : 00
Emergency Blackout Work Plan (แผนฉุกเฉินไฟฟ้าดับ)				

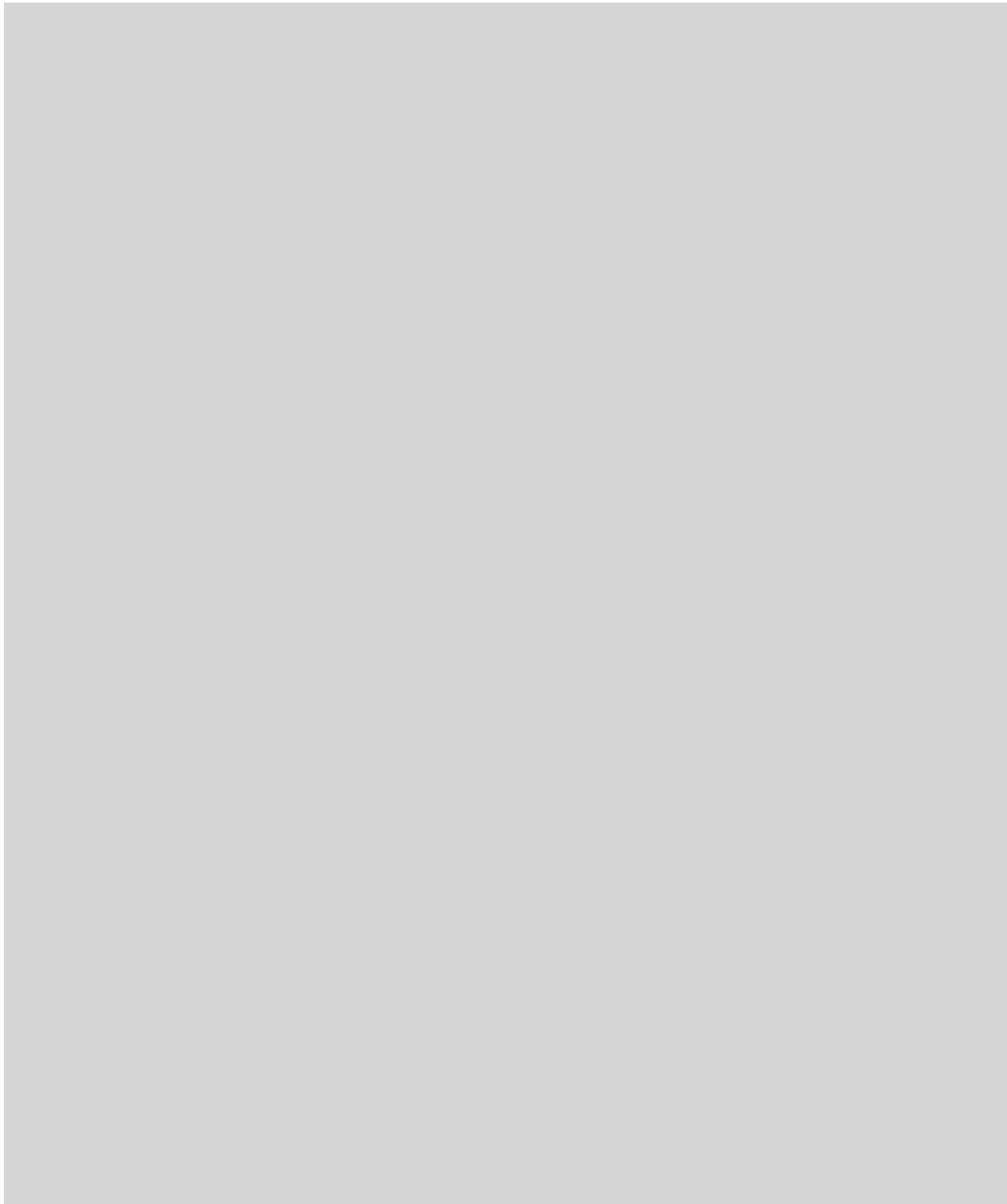
posco TCS	Work Instruction	Work	Enforcement Date : 2016/10/31	Page :9/13
	Level 2	Outline	WI-MDE-029	Rev. : 00
Emergency Blackout Work Plan (แผนฉุกเฉินไฟฟ้าดับ)				

posco TCS	Work Instruction	Work	Enforcement Date : 2016/10/31	Page :10/13
	Level 2	Outline	WI-MDE-029	Rev. : 00
Emergency Blackout Work Plan (แผนฉุกเฉินไฟฟ้าดับ)				

posco TCS	Work Instruction	Work	Enforcement Date : 2016/10/31	Page :11/13
	Level 2	Outline	WI-MDE-029	Rev. : 00
Emergency Blackout Work Plan (แผนฉุกเฉินไฟฟ้าดับ)				

posco TCS	Work Instruction	Work	Enforcement Date : 2016/10/31	Page :12/13
	Level 2	Outline	WI-MDE-029	Rev. : 00
Emergency Blackout Work Plan (แผนฉุกเฉินไฟฟ้าดับ)				

posco TCS	Work Instruction	Work	Enforcement Date : 2016/10/31	Page :13/13
	Level 2 Emergency Blackout Work Plan (แผนฉุกเฉินไฟฟ้าดับ)	Outline	WI-MDE-029	Rev. : 00



ภาคผนวก ข.2-9

เอกสารการส่งน้ำเสียไปบำบัดที่ระบบบำบัดน้ำเสียส่วนกลาง
ของนิคมอุตสาหกรรมอมตะซิตี้ ระยอง



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TESTING 1699

ANALYSIS REPORT

CUSTOMER NAME : AMATA U CO., LTD.
ADDRESS : 700/2 MOO 1 KHLONG TAMRU MUEANG CHON BURI CHON BURI 20000
CONTACT INFORMATION : TEL : 08 5438 0007 e-mail : jiraporn@amatau.com
SAMPLING NAME : CMCT01305 บจ. โพลีโตนัล สเตล (ประเทศไทย)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : JANUARY 15, 2025
SAMPLING TIME : 15:00 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR PANUWAT PINTHUTHO ๓-334-๔-0002
ANALYZED BY : MISS WARUNYA AUNGWORRATRAKON ๓-334-๔-0005

RECEIVED DATE : JANUARY 15, 2025
ANALYTICAL DATE : JANUARY 15-21, 2025
ISSUE DATE : JANUARY 22, 2025
REPORT NO. : 2025-A001030
WORK NO. : 2024-011983
ANALYSIS NO. : A25AA048-0020

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD
			EFFLUENT A25AA048-0020	
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.5 (36.0°C)	5.5-9.0
TEMPERATURE ^b	°C	FIELD METHODS (SM: PART 2550 B)	36.0	≤ 45
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5 DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	512	≤ 500
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	110	≤ 750
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED AT 103-105 °C (SM: PART 2540 D)	37.1	≤ 200
TOTAL DISSOLVED SOLIDS ^a	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	1,054	≤ 3,000
FAT, OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	< 3	≤ 10
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BLACK	

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

REGULATORY STANDARD : ANNOUNCEMENT OF THE INDUSTRIAL ESTATE AUTHORITY OF THAILAND NO. 029/2567 : STANDARD FOR WASTEWATER DRAINAGE INTO THE CENTRAL WASTEWATER TREATMENT PLANT IN THE INDUSTRIAL ESTATE.

△ : CUSTOMER INFORMATION



๓-334-๔-0002

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ANALYSIS REPORT

CUSTOMER NAME : AMATA U CO., LTD.
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CONTACT INFORMATION : TEL : 08 5438 0007 e-mail : jiraporn@amatau.com
SAMPLING NAME : CMCT01305 บจ. โพลีโตนัล สเตล (ประเทศไทย)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : JANUARY 15, 2025
SAMPLING TIME : 15:00 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : UAE, AMATA TEAM
ANALYZED BY : MISS CHOMTHANAN APHIPATPAPHA

RECEIVED DATE : JANUARY 15, 2025
ANALYTICAL DATE : JANUARY 15-21, 2025
ISSUE DATE : JANUARY 22, 2025
REPORT NO. : 2025-A001047
WORK NO. : 2024-011983
ANALYSIS NO. : A25AA048-0020

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD
			EFFLUENT A25AA048-0020	
CYANIDE	mg/L CN	DISTILLATION, COLOURIMETRIC METHOD (SM: PART 4500-CN: C AND PART 4500-CN: E)	< 0.010	-
METALS				
COPPER	mg/L Cu	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	< 0.050	≤ 2.0
LEAD	mg/L Pb	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	< 0.200	≤ 0.2
MANGANESE	mg/L Mn	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.266	≤ 5.0
NICKEL	mg/L Ni	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	< 0.100	≤ 1.0
IRON	mg/L Fe	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.805	≤ 10.0
ZINC	mg/L Zn	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	2.56	≤ 5.0
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BLACK	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

REGULATORY STANDARD : ANNOUNCEMENT OF THE INDUSTRIAL ESTATE AUTHORITY OF THAILAND NO. 029/2567 : STANDARD FOR WASTEWATER DRAINAGE INTO THE CENTRAL WASTEWATER TREATMENT PLANT IN THE INDUSTRIAL ESTATE.



LABORATORY SUPERVISOR

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ANALYSIS REPORT

CUSTOMER NAME : AMATA U CO., LTD.

ADDRESS : 700/2 MOO 1 KHLONG TAMRU MUEANG CHON BURI CHON BURI 20000

CONTACT INFORMATION : TEL : 08 5438 0007 e-mail : jiraporn@amatau.com

SAMPLING NAME : CMCT01305 บจ. โพลีโธ ไคท์เคด สตีล (ประเทศไทย)

SAMPLE TYPE : EFFLUENT

SAMPLING DATE : FEBRUARY 7, 2025

SAMPLING TIME : 09:40 HOUR

SAMPLING METHOD : GRAB

SAMPLING BY : MR. SARAWUT FONGCHAIYAPHUM ๓-334-๑-0001

ANALYZED BY : MISS WARUNYA AUNGWORRATRAKON ๓-334-๑-0005

RECEIVED DATE : FEBRUARY 7, 2025

ANALYTICAL DATE : FEBRUARY 7-14, 2025

ISSUE DATE : FEBRUARY 18, 2025

REPORT NO. : 2025-A002133

WORK NO. : 2025-000604

ANALYSIS NO. : A25AA117-0018

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD
			EFFLUENT A25AA117-0018	
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.3 (34.6°C)	5.5-8.0
TEMPERATURE °	°C	FIELD METHODS (SM: PART 2560 B)	34.6	≤ 45
BIOCHEMICAL OXYGEN DEMAND ^b	mg/L	5 DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O ₂ G)	28.3	≤ 500
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	99.2	≤ 750
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED AT 103-105 °C (SM: PART 2540 D)	16.5	≤ 200
TOTAL DISSOLVED SOLIDS ^a	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	903	≤ 3,000
FAT, OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	< 3	≤ 10
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR BLACK	

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT NOT IN SCOPE OF ACCREDITATION

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

REGULATORY STANDARD : ANNOUNCEMENT OF THE INDUSTRIAL ESTATE AUTHORITY OF THAILAND NO. 029/2567 : STANDARD FOR WASTEWATER DRAINAGE INTO THE CENTRAL WASTEWATER TREATMENT PLANT IN THE INDUSTRIAL ESTATE.

Δ : CUSTOMER INFORMATION



LABORATORY SUPERVISOR
๓-334-๑-0002



ANALYSIS REPORT

CUSTOMER NAME : AMATA U CO., LTD.

ADDRESS : 700/2 MOO 1 KHLONG TAMRU MUEANG CHON BURI CHON BURI 20000

CONTACT INFORMATION : TEL : 08 5438 0007 e-mail : jiraporn@amatau.com

SAMPLING NAME : CMCT01305 บจ. โพลีโธ ไคท์เคด สตีล (ประเทศไทย)

SAMPLE TYPE : EFFLUENT

SAMPLING DATE : FEBRUARY 7, 2025

SAMPLING TIME : 09:40 HOUR

SAMPLING METHOD : GRAB

SAMPLING BY : UAE, AMATA TEAM

ANALYZED BY : MISS CHOMTHANAN APHIPATPAPHA

RECEIVED DATE : FEBRUARY 7, 2025

ANALYTICAL DATE : FEBRUARY 7-14, 2025

ISSUE DATE : FEBRUARY 18, 2025

REPORT NO. : 2025-A002146

WORK NO. : 2025-000604

ANALYSIS NO. : A25AA117-0018

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD
			EFFLUENT A25AA117-0018	
CYANIDE	mg/L CN ⁻	DISTILLATION, COLOURIMETRIC METHOD (SM: PART 4500-CN ⁻ C AND PART 4500-CN ⁻ E)	< 0.010	
METALS				
COPPER	mg/L Cu	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	< 0.050	≤ 2.0
LEAD	mg/L Pb	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	< 0.200	≤ 0.2
MANGANESE	mg/L Mn	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.091	≤ 5.0
NICKEL	mg/L Ni	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	< 0.100	≤ 1.0
IRON	mg/L Fe	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.272	≤ 10.0
ZINC	mg/L Zn	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.221	≤ 5.0
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR BLACK	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

REGULATORY STANDARD : ANNOUNCEMENT OF THE INDUSTRIAL ESTATE AUTHORITY OF THAILAND NO. 029/2567 : STANDARD FOR WASTEWATER DRAINAGE INTO THE CENTRAL WASTEWATER TREATMENT PLANT IN THE INDUSTRIAL ESTATE.





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ANALYSIS REPORT

CUSTOMER NAME : AMATA U CO., LTD.
ADDRESS : 700/2 MOO 1 KHLONG TAMRU MUEANG CHON BURI CHON BURI 20000
CONTACT INFORMATION : TEL : 08 5438 0007 e-mail : jiraporn@amatau.com
SAMPLING NAME : CMCT01305 บจ. โพลีโศ โสทัศน์ สตีล (ประเทศไทย)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : FEBRUARY 26, 2025
SAMPLING TIME : 13:25 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WETIS JATIKUL จ-334-ก-0004
ANALYZED BY : MISS WARUNYA AUNGWORRATRAKON จ-334-ก-0005
RECEIVED DATE : FEBRUARY 26, 2025
ANALYTICAL DATE : FEBRUARY 26 - MARCH 5, 2025
ISSUE DATE : MARCH 8, 2025
REPORT NO. : 2025-A002480
WORK NO. : 2025-001638
ANALYSIS NO. : A25AA140-0013

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD
			EFFLUENT A25AA140-0013	
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.2 (34.7°C)	5.5-9.0
TEMPERATURE ^a	°C	FIELD METHODS (SM: PART 2550 B)	34.7	≤ 45
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5 DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O ₂ G)	30.9	≤ 600
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	911	≤ 750
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED AT 103-105 °C (SM: PART 2540 D)	18.0	≤ 200
TOTAL DISSOLVED SOLIDS ^a	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	789	≤ 3,000
FAT, OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	≤ 3	≤ 10
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BLACK	

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT NOT IN SCOPE OF ACCREDITATION

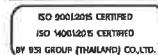
SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

REGULATORY STANDARD : ANNOUNCEMENT OF THE INDUSTRIAL ESTATE AUTHORITY OF THAILAND NO. 029/2567 : STANDARD FOR WASTEWATER DRAINAGE INTO THE CENTRAL WASTEWATER TREATMENT PLANT IN THE INDUSTRIAL ESTATE.

^a : CUSTOMER INFORMATION



LABORATORY SUPERVISOR
จ-334-ก-0002



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ANALYSIS REPORT

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ADDRESS : 700/2 MOO 1 KHLONG TAMRU MUEANG CHON BURI CHON BURI 20000
CONTACT INFORMATION : TEL : 08 5438 0007 e-mail : jiraporn@amatau.com
SAMPLING NAME : CMCT01305 บจ. โพลีโศ โสทัศน์ สตีล (ประเทศไทย)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : FEBRUARY 26, 2025
SAMPLING TIME : 13:25 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : UAE, AMATA TEAM
ANALYZED BY : MISS CHOMTHANAN APHIPATPAPHA
RECEIVED DATE : FEBRUARY 26, 2025
ANALYTICAL DATE : FEBRUARY 26 - MARCH 5, 2025
ISSUE DATE : MARCH 10, 2025
REPORT NO. : 2025-A002500
WORK NO. : 2025-001638
ANALYSIS NO. : A25AA140-0013

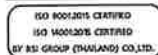
PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD
			EFFLUENT A25AA140-0013	
CYANIDE	mg/L CN	DISTILLATION, COLOURIMETRIC METHOD (SM: PART 4500-CN- C AND PART 4500-CN- E)	< 0.010	-
METALS				
COPPER	mg/L Cu	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	< 0.050	≤ 2.0
LEAD	mg/L Pb	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	< 0.200	≤ 0.2
MANGANESE	mg/L Mn	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.103	≤ 5.0
NICKEL	mg/L Ni	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	< 0.100	≤ 1.0
IRON	mg/L Fe	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.318	≤ 10.0
ZINC	mg/L Zn	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.253	≤ 5.0
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BLACK	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

REGULATORY STANDARD : ANNOUNCEMENT OF THE INDUSTRIAL ESTATE AUTHORITY OF THAILAND NO. 029/2567 : STANDARD FOR WASTEWATER DRAINAGE INTO THE CENTRAL WASTEWATER TREATMENT PLANT IN THE INDUSTRIAL ESTATE.



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ANALYSIS REPORT

CUSTOMER NAME : AMATA U CO., LTD.
ADDRESS : 700/2 MOO 1 KHLONG TAMRU MUEANG CHON BURI CHON BURI 20000
CONTACT INFORMATION : TEL : 08 5438 0007 e-mail : jiraporn@amatau.com
SAMPLING NAME : CMCT01305 นก. โหลโต ไค้หนัด สด (ประพจน์)

SAMPLE TYPE : EFFLUENT
SAMPLING DATE : MARCH 27, 2025
SAMPLING TIME : 15:05 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WETIS JATIKUL 7-334-a-0004
ANALYZED BY : MISS WARUNYA AUNGWORRATRAKON 7-334-a-0005

RECEIVED DATE : MARCH 27, 2025
ANALYTICAL DATE : MARCH 27 - APRIL 3, 2025
ISSUE DATE : APRIL 11, 2025
REPORT NO. : 2025-A003920
WORK NO. : 2025-002675
ANALYSIS NO. : A25AA215-0017

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT EFFLUENT A25AA215-0017	REGULATORY STANDARD
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.5 (34.5°C)	5.5-9.0
TEMPERATURE ^c	°C	FIELD METHODS (SM: PART 2550 B)	34.5	≤ 45
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5 DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O ₂ G)	6.9	≤ 500
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	50.4	≤ 750
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED AT 103-105 °C (SM: PART 2540 D)	10.1	≤ 200
TOTAL DISSOLVED SOLIDS ^a	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	874	≤ 3,000
FAT, OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	< 3	≤ 10
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BLACK	

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT NOT IN SCOPE OF ACCREDITATION

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

REGULATORY STANDARD : ANNOUNCEMENT OF THE INDUSTRIAL ESTATE AUTHORITY OF THAILAND NO. 029/2567 : STANDARD FOR WASTEWATER DRAINAGE INTO THE CENTRAL WASTEWATER TREATMENT PLANT IN THE INDUSTRIAL ESTATE.

^a : CUSTOMER INFORMATION



ANALYSIS REPORT

CUSTOMER NAME : AMATA U CO., LTD.
ADDRESS : 700/2 MOO 1 KHLONG TAMRU MUEANG CHON BURI CHON BURI 20000
CONTACT INFORMATION : TEL : 08 5438 0007 e-mail : jiraporn@amatau.com
SAMPLING NAME : CMCT01305 นก. โหลโต ไค้หนัด สด (ประพจน์)

SAMPLE TYPE : EFFLUENT
SAMPLING DATE : MARCH 27, 2025
SAMPLING TIME : 15:05 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : UAE, AMATA TEAM
ANALYZED BY : MISS CHOMTHANAN APHIPATPAPHA

RECEIVED DATE : MARCH 27, 2025
ANALYTICAL DATE : MARCH 27 - APRIL 3, 2025
ISSUE DATE : APRIL 16, 2025
REPORT NO. : 2025-A004223
WORK NO. : 2025-002675
ANALYSIS NO. : A25AA215-0017

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT EFFLUENT A25AA215-0017	REGULATORY STANDARD
CYANIDE	mg/L CN	DISTILLATION, COLOURIMETRIC METHOD (SM: PART 4500-CN C AND PART 4500-CN E)	< 0.010	-
METALS				
COPPER	mg/L Cu	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	< 0.050	≤ 2.0
MANGANESE	mg/L Mn	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.084	≤ 5.0
NICKEL	mg/L Ni	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	< 0.100	≤ 1.0
ZINC	mg/L Zn	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.172	≤ 5.0
LEAD	mg/L Pb	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	< 0.200	≤ 0.2
IRON	mg/L Fe	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.213	≤ 10.0
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BLACK	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

REGULATORY STANDARD : ANNOUNCEMENT OF THE INDUSTRIAL ESTATE AUTHORITY OF THAILAND NO. 029/2567 : STANDARD FOR WASTEWATER DRAINAGE INTO THE CENTRAL WASTEWATER TREATMENT PLANT IN THE INDUSTRIAL ESTATE.





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ANALYSIS REPORT

CUSTOMER NAME : AMATA U CO., LTD.
ADDRESS : 700/2 MOO 1 KHLONG TAMRU MUEANG CHON BURI CHON BURI 20000
CONTACT INFORMATION : TEL : 08 5438 0007 e-mail : jiraporn@amatau.com
SAMPLING NAME : CMCT01305 บจ. โพลีโกล ไคท์เด็ค สตีล (ประเทศไทย)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : APRIL 30, 2025
SAMPLING TIME : 11:05 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WETIS JATIKUL ๓-334-๓-0004
ANALYZED BY : MISS WARUNYA AUNGWORRATRAKON ๓-334-๓-0005

RECEIVED DATE : APRIL 30, 2025
ANALYTICAL DATE : APRIL 30 - MAY 7, 2025
ISSUE DATE : MAY 12, 2025
REPORT NO. : 2025-A005264
WORK NO. : 2025-003544
ANALYSIS NO. : A25AA277-0017

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT EFFLUENT A25AA277-0017	REGULATORY STANDARD
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.1 (34.6°C)	5.5-9.0
TEMPERATURE ^a	°C	FIELD METHODS (SM: PART 2550 B)	34.6	≤ 45
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5 DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O ₂ G)	29.9	≤ 500
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLEX, TITRIMETRIC METHOD (SM: PART 5220 C)	85.5	≤ 750
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED AT 103-105 °C (SM: PART 2540 D)	14.6	≤ 200
TOTAL DISSOLVED SOLIDS ^a	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	971	≤ 3,000
FAT, OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	< 3	≤ 10
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			WHITE/TURBID BLACK	

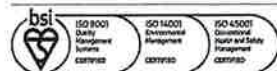
^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT NOT IN SCOPE OF ACCREDITATION

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

REGULATORY STANDARD : ANNOUNCEMENT OF THE INDUSTRIAL ESTATE AUTHORITY OF THAILAND NO. 029/2567 : STANDARD FOR WASTEWATER DRAINAGE INTO THE CENTRAL WASTEWATER TREATMENT PLANT IN THE INDUSTRIAL ESTATE.

^Δ : CUSTOMER INFORMATION



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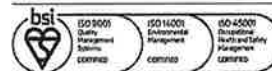
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CONTACT INFORMATION : TEL : 08 5438 0007 e-mail : jiraporn@amatau.com
SAMPLING NAME : CMCT01305 บจ. โพลีโกล ไคท์เด็ค สตีล (ประเทศไทย)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : APRIL 30, 2025
SAMPLING TIME : 11:05 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : UAE, AMATA TEAM
ANALYZED BY : MISS CHOMTHANAN APHIPATPAPHA

RECEIVED DATE : APRIL 30, 2025
ANALYTICAL DATE : APRIL 30 - MAY 7, 2025
ISSUE DATE : MAY 13, 2025
REPORT NO. : 2025-A005276
WORK NO. : 2025-003544
ANALYSIS NO. : A25AA277-0017

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT EFFLUENT A25AA277-0017	REGULATORY STANDARD
CYANIDE	mg/L CN	DISTILLATION, COLOURIMETRIC METHOD (SM: PART 4500-CN- C AND PART 4500-CN- E)	< 0.010	-
METALS				
COPPER	mg/L Cu	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	< 0.050	≤ 2.0
LEAD	mg/L Pb	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	< 0.200	≤ 0.2
MANGANESE	mg/L Mn	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.058	≤ 5.0
NICKEL	mg/L Ni	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	< 0.100	≤ 1.0
IRON	mg/L Fe	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.160	≤ 10.0
ZINC	mg/L Zn	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.169	≤ 5.0
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			WHITE/TURBID BLACK	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

REGULATORY STANDARD : ANNOUNCEMENT OF THE INDUSTRIAL ESTATE AUTHORITY OF THAILAND NO. 029/2567 : STANDARD FOR WASTEWATER DRAINAGE INTO THE CENTRAL WASTEWATER TREATMENT PLANT IN THE INDUSTRIAL ESTATE.



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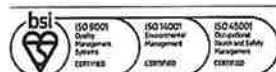
ANALYSIS REPORT

CUSTOMER NAME : AMATA U CO., LTD.
ADDRESS : 700/2 MOO 1 KHLONG TAMRU MUEANG CHON BURI CHON BURI 20000
CONTACT INFORMATION : TEL : 08 5438 0007 e-mail : jiraporn@amatau.com
SAMPLING NAME : CMCT01305 บจ. โพลีโกล ไคท์เน็ค สตีล (ประเทศไทย)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : MAY 28, 2025
SAMPLING TIME : 11:10 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : UAE, AMATA TEAM
ANALYZED BY : MISS CHOMTHANAN APHIPATPAPHA

RECEIVED DATE : MAY 28, 2025
ANALYTICAL DATE : MAY 28 - JUNE 4, 2025
ISSUE DATE : JUNE 11, 2025
REPORT NO. : 2025-A006482
WORK NO. : 2025-004447
ANALYSIS NO. : A25AA344-0017

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT EFFLUENT A25AA344-0017	REGULATORY STANDARD
CYANIDE	mg/L CN ⁻	DISTILLATION, COLOURIMETRIC METHOD (SM: PART 4500-CN C AND PART 4500-CN ⁻ E)	< 0.010	
METALS				
COPPER	mg/L Cu	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	< 0.060	≤ 2.0
LEAD	mg/L Pb	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	< 0.200	≤ 0.2
MANGANESE	mg/L Mn	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.074	≤ 5.0
NICKEL	mg/L Ni	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	< 0.100	≤ 1.0
IRON	mg/L Fe	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.385	≤ 10.0
ZINC	mg/L Zn	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.213	≤ 5.0
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BLACK	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.
REGULATORY STANDARD : ANNOUNCEMENT OF THE INDUSTRIAL ESTATE AUTHORITY OF THAILAND NO. 029/2567 : STANDARD FOR WASTEWATER DRAINAGE INTO THE CENTRAL WASTEWATER TREATMENT PLANT IN THE INDUSTRIAL ESTATE.



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• THIS ANALYSIS REPORT APPROVES ONLY FOR THE SAMPLES AS RECEIVED.

1/1



- End of Analysis Report -



ANALYSIS REPORT

CUSTOMER NAME : AMATA U CO., LTD.
ADDRESS : 700/2 MOO 1 KHLONG TAMRU MUEANG CHON BURI CHON BURI 20000
CONTACT INFORMATION : TEL : 08 5438 0007 e-mail : jiraporn@amatau.com
SAMPLING NAME : CMCT01305 บจ. โพลีโกล ไคท์เน็ค สตีล (ประเทศไทย)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : MAY 28, 2025
SAMPLING TIME : 11:10 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WETTS JATIKUL 7-334-a-0004
ANALYZED BY : MISS WARUNYA AUNGWORRATRAKON 7-334-a-0005

RECEIVED DATE : MAY 28, 2025
ANALYTICAL DATE : MAY 28 - JUNE 4, 2025
ISSUE DATE : JUNE 10, 2025
REPORT NO. : 2025-A006470
WORK NO. : 2025-004447
ANALYSIS NO. : A25AA344-0017

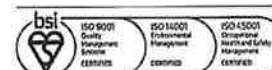
PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT EFFLUENT A25AA344-0017	REGULATORY STANDARD
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	6.9 (36.4°C)	5.5-9.0
TEMPERATURE ^c	°C	FIELD METHODS (SM: PART 2550 B)	36.4	≤ 45
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5 DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O ₂ G)	7.3	≤ 500
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	53.7	≤ 750
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED AT 103-105 °C (SM: PART 2540 D)	9.8	≤ 200
TOTAL DISSOLVED SOLIDS ^a	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	680	≤ 3,000
FAT, OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	< 3	≤ 10
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BLACK	

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT NOT IN SCOPE OF ACCREDITATION

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.
REGULATORY STANDARD : ANNOUNCEMENT OF THE INDUSTRIAL ESTATE AUTHORITY OF THAILAND NO. 029/2567 : STANDARD FOR WASTEWATER DRAINAGE INTO THE CENTRAL WASTEWATER TREATMENT PLANT IN THE INDUSTRIAL ESTATE.

^a : CUSTOMER INFORMATION



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- End of Analysis Report -

ภาคผนวก ข.2-10

เอกสารสรุปผลการตรวจวัดคุณภาพน้ำทิ้ง
ด้วยระบบตรวจวัดแบบต่อเนื่อง

พารามิเตอร์		ข้อมูลประจำปี 2568					
		มกราคม	กุมภาพันธ์	มีนาคม	เมษายน	พฤษภาคม	มิถุนายน
pH Online	ค่าสูงสุด	8.44	8.28	8.26	8.24	7.13	7.10
	ค่าต่ำสุด	8.01	8.10	8.09	5.95	7.10	7.00
	ค่าเฉลี่ย	8.14	8.17	8.17	6.97	6.06	7.06
COD Online	ค่าสูงสุด	300.00	300.00	299.00	327.40	219.63	208.84
	ค่าต่ำสุด	99.49	90.83	102.38	115.21	18.30	57.96
	ค่าเฉลี่ย	194.04	173.73	191.47	175.10	127.60	152.07

ภาคผนวก ข.2-11

ผลการตรวจวัดคุณภาพน้ำผิวดินของห้วยภูไท



EASTERN THAI CONSULTING 1992 CO., LTD.

683 Moo 11 Sukhaphibarn 8 Rd., Nongkham, Sriracha, Chonburi 20230
Tel. 0-3848-1197-8, 0-3876-3031-2 Fax : 0-3848-2095 E-mail : marketing@etc1992.com



TESTING
No.0159

Test Report

Request No : W6802377, W 6804199
Report No : 6803-0289-1, 6804-1505

Customer : Amata City Rayong Co.,Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**
Sampling Source : หัวขุไทร** Sample No : W 68021073, W 68040598
Sample Name : บริเวณบ้านหนองตองเหนือสายถนนน้ำในนิคมฯ (W1)** Sampling Date : 15/02/2025, 07/04/2025**
Sampling By : ETC** Sampling Time : 9:20 AM, 12:20 PM **
Sampling Method : Grab** Received Date : 17/02/2025, 08/04/2025
Tested Date : 17/02/2025 - 04/03/2025 Reported Date : 30/04/2025

Parameter	Unit	Method	Result	Standard ¹
Biochemical Oxygen Demand [#]	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	8.7	≤2
Chloride *	mg/L as Cl ₂	Argentometric Method (SM:4500-Cl- B)	48.4	*
Coliform Bacteria *	MPN:100 mL	MPN Test Method (SM:9221B)	35,000	≤20000
Conductivity *	10 ⁻⁶ S/cm	Laboratory Method (SM:2510B)	414	*
Cyanide *	mg/L as HCN	Distillation, Colorimetric Method (SM:4500 CN- C, E)	0.001	≤0.005
Dissolved Oxygen*	mg/L	Azide Modification Method (SM:4500 -O C)	8.4	≥4
Fecal Coliform Bacteria*	MPN:100 mL	MPN Test Method (SM:9221F)	13,000	≤4000
Manganese */2	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.85	≤1

Physical Apperance : 1. Sample : yellowish, lightly SS
2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3
2./2 Sample No. W 68040598 : Sampling Date 07/04/2025 (12:20 PM): Tested Date 08/04/2025 - 17/04/2025
3. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023./ Parameter Outside The Scope of The Registration of Department of Industrial Works
4. Miss Nunnaphat Bakhuntod is Technical Munagement. / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]
5. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad *
6. *** = ข้อมูลนี้ของน้ำจะถือว่าไม่สูงกว่าข้อมูลมาตรฐานที่กำหนดไว้ = These data are non laboratory data.

SUPPLEMENT TO TEST REPORT NO. 6803-0289



Examined By :
(Miss

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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Tel. 0-3848-1197-8, 0-3876-3031-2 Fax : 0-3848-2095 E-mail : marketing@etc1992.com



TESTING
No.0159

Test Report

Request No : W6802377, W 6804199
Report No : 6803-0289-1, 6804-1505

Customer : Amata City Rayong Co.,Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**
Sampling Source : หัวขุไทร** Sample No : W 68021073, W 68040598
Sample Name : บริเวณบ้านหนองตองเหนือสายถนนน้ำในนิคมฯ (W1)** Sampling Date : 15/02/2025, 07/04/2025**
Sampling By : ETC** Sampling Time : 9:20 AM, 12:20 PM**
Sampling Method : Grab** Received Date : 17/02/2025, 08/04/2025
Tested Date : 17/02/2025 - 04/03/2025 Reported Date : 30/04/2025

Parameter	Unit	Method	Result	Standard ¹
Nitrogen (Nitrate) *	mg/L as NO ₃ - N	Cadmium Reduction Method (SM:4500 -NO ₃ -B)	0.70	≤5
pH (on site) *		Electrometric Method	7.0	5.0-9.0
Phenol *	mg/L	Distillation, Direct Photometric Method (SM:5530B, D)	< 0.005	≤0.005
Phosphorus*	mg/L as P	Ascorbic Acid Method (SM:4500 -P B)	0.25	*
Sodium *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120 B)	37.5	*
Sulfate *	mg/L as SO ₄ ²⁻	Turbidimetric Method (SM:4500 -SO ₄ ²⁻ E)	40.5	*
Temperature *	°C	Laboratory and Field Method (SM:2550 B)	26	***

Physical Apperance : 1. Sample : yellowish, lightly SS
2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3
2./2 Sample No. W 68040598 : Sampling Date 07/04/2025 (12:20 PM): Tested Date 08/04/2025 - 17/04/2025
3. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023./ Parameter Outside The Scope of The Registration of Department of Industrial Works
4. Miss Nunnaphat Bakhuntod is Technical Munagement. / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]
5. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad *
6. *** = ข้อมูลนี้ของน้ำจะถือว่าไม่สูงกว่าข้อมูลมาตรฐานที่กำหนดไว้ = These data are non laboratory data.

SUPPLEMENT TO TEST REPORT NO. 6803-0289



Examined B

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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Tel. 0-3848-1197-8, 0-3876-3031-2 Fax : 0-3848-2095 E-mail : marketing@etc1992.com



TESTING
No.0159

Test Report

Request No : W6802377, W 6804199
Report No : 6803-0289-1, 6804-1505

Customer : Amata City Rayong Co.,Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**
Sampling Source : หัวขุไทร** Sample No : W 68021073, W 68040598
Sample Name : บริเวณบ้านหนองคองเหนือสายกั้นน้ำในนิคมฯ (W1)** Sampling Date : 15/02/2025, 07/04/2025**
Sampling By : ETC** Sampling Time : 9:20 AM, 12:20 PM**
Sampling Method : Grab** Received Date : 17/02/2025, 08/04/2025
Tested Date : 17/02/2025 - 04/03/2025 Reported Date : 30/04/2025

Parameter	Unit	Method	Result	Standard ¹⁾
Total Dissolved Solids #	mg/L	Dried at 180 degree celsius (SM:2540C)	234	*
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	47	*
Turbidity *	NTU	Nephelometric Method (SM:2130B)	33.3	*

Physical Apperance : 1. Sample : yellowish, highly SS

2. Container : Normal [PE 0.5 L(3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) . Class 3

2./2 Sample No. W 68040598 : Sampling Date 07/04/2025 (12:20 PM); Tested Date 08/04/2025 - 17/04/2025

3. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater,

APHA, AWWA, WEF, 24th Edition, 2023 / Parameter Outside The Scope of The Registration of Department of Industrial Works

4. Miss Nunnaphat Bakhuntod is Technical Management. / MDL = Method Detection Limit | MDL of Cyanide = 0.008 mg/L |

5. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad *

6. ***** = ข้อมูลของน้ำจะส่งไม่สูงกว่าข้อมูลมาตรฐานที่กำหนดไว้ ***** = These data

SUPPLEMENT TO TEST REPORT NO. 6803-0289



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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683 หมู่ 11 ถนนพหลโยธิน 8 ถนนพหลโยธิน อ.ศรีราชา จ.ชลบุรี 20230
โทร. 0-3848-1197, 0-3876-3031-2 แฟกซ์ : 0-3848-2095
เว็บไซต์ : http://www.etc1992.com อีเมล : info@etc1992.com



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683 Moo 11 Sukhapibarn 8 Rd., Nongkham, Sriracha, Chonburi 20230
Tel. 0-3848-1197, 0-3876-3031-2 Fax : 0-3848-2095
Website : http://www.etc1992.com E-mail : info@etc1992.com

Request No. W6802377

Report No. 6803-0289

TEST REPORT

Customer : Amata City Rayong Co.,Ltd.
Address : 7 Moo.3 T. Bowin , Sriracha , Chonburi 20230
Sampling Source : หัวขุไทร Sample No. : W 68021073
Sample Name : บริเวณบ้านหนองคองเหนือสายกั้นน้ำในนิคมฯ (W1) Sampling Date : 15/02/2025
Sampling By : ETC Sampling Time : 9:20 AM
Sampling Method : Grab Received Date : 17/02/2025
Tested Date : 17/02/2025 - 04/03/2025 Reported Date : 10/03/2025

Parameter	Unit	Method	Method Detection Limit	Result	Standard ¹⁾
Organochlorine Pesticides					
alpha-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.020	Not Detected	≤ 0.02
beta-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
gamma-BHC (Lindane)	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
delta-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Heptachlor	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.2
Aldrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.1
Heptachlor epoxide (isomer B)	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.2
trans-Chlordane	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Endosulfan I	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
cis-Chlordane	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Dieldrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.1
4,4'-DDE	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Endrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.050	Not Detected	****
Endosulfan II	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
4,4'-DDD	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Endrin aldehyde	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Endosulfan sulfate	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
4,4'-DDT	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 1.0
Endrin ketone	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Methoxychlor	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*

Physical Apperance : 1. Sample : yellowish, lightly SS

2. Container : Normal [PE 0.5 L(3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

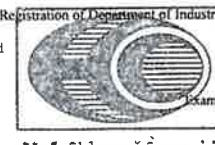
Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3

2.***** = ต้องตรวจไม่พบตามวิธีตรวจสอบที่กำหนด

3. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

4. Parameter Outside The Scope of The Registration of Department of Industrial Works

5. Sampling By Mr. Parkpoom Buasawad



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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โทร. 0-3848-1197, 0-3876-3031-2 แฟกซ์ : 0-3848-2095
เว็บไซต์ : http://www.etc1992.com อีเมล : info@etc1992.com



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Tel. 0-3848-1197, 0-3876-3031-2 Fax : 0-3848-2095
Website : http://www.etc1992.com E-mail : info@etc1992.com

Test Report

Request No : W6802377

Report No : 6803-0289

Customer : Amala City Rayong Co., Ltd.

Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230

Sampling Source : ห้วยคูไทร

Sample No : W 68021073

Sample Name : บริเวณบ้านหนองตอง เหนือค่ายกั้นน้ำในนิคมฯ (W1)

Sampling Date : 15/02/2025

Sampling By : ETC

Sampling Time : 9:20 AM

Sampling Method : Grab

Received Date : 17/02/2025

Tested Date : 17/02/2025 - 04/03/2025

Reported Date : 10/03/2025

Parameter	Unit	Method	Result	Standard ¹
Ammonia Nitrogen #	mg/L	Spectrophotometer	0.61	≤0.5

Physical Appearance : 1. Sample: yellowish, lightly SS

2. Container: Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3

2. # Tested by the office of Public Health and Environmental Technology Services Faculty of Public Health Mahidol University

3. Sampling By Mr. Parkpoom Buasawad



Examined By :
(Miss)

บริษัท อีสเทิร์น ไทย คอนซัลติ้ง 1992 จำกัด

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Tel. 0-3848-1197, 0-3876-3031-2 Fax : 0-3848-2095 E-mail : marketing@etc1992.com



TESTING
No.0159

Test Report

Request No : W6802377, W 6804199

Report No : 6803-0290-1, 6804-1506

Customer : Amala City Rayong Co., Ltd.**

Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**

Sampling Source : ห้วยคูไทร**

Sample No : W 68021074, W 68040599

Sample Name : บริเวณค่ายกั้นน้ำในนิคมฯ (W2)**

Sampling Date : 15/02/2025, 07/04/2025**

Sampling By : ETC**

Sampling Time : 9:40 AM, 12:10 PM**

Sampling Method : Grab**

Received Date : 17/02/2025, 08/04/2025

Tested Date : 17/02/2025 - 04/03/2025

Reported Date : 30/04/2025

Parameter	Unit	Method	Result	Standard ¹
Biochemical Oxygen Demand #/2	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	7.9	≤2
Chloride #	mg/L as Cl ₂	Argentometric Method (SM:4500-Cl- B)	51.6	*
Coliform Bacteria *	MPN:100 mL	MPN Test Method (SM:9221B)	7,900	≤20000
Conductivity *	10 ⁻⁶ S/cm	Laboratory Method (SM:2510B)	496	*
Cyanide *	mg/L as HCN	Distillation, Colorimetric Method (SM:4500 CN- C, E)	0.003	≤0.005
Dissolved Oxygen*	mg/L	Azide Modification Method (SM:4500 -O C)	4.9	≥4
Fecal Coliform Bacteria*	MPN:100 mL	MPN Test Method (SM:9221E)	170	≤4000
Manganese*	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	1.30	≤1

Physical Appearance : 1. Sample: yellowish, lightly SS

2. Container: Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3

2. /2 Sample No. W 68040599 : Sampling Date 07/04/2025 (12:10 PM); Tested Date 08/04/2025 - 12/04/2025

3. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater,

APHA, AWWA, WEF, 24th Edition, 2023 / Parameter Outside The Scope of The Registration of Department of Industrial Works

4. Miss Nunnaphat Bakhundot is Technical Management. / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]

5. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad *

6. *** = ข้อมูลนี้ยังไม่ผ่านการรับรองมาตรฐานห้องปฏิบัติการ *** = These data are non laboratory data.

SUPPLEMENT TO TEST REPORT NO. 6803-0290



Examined By :
(N)

บริษัท อีสเทิร์น ไทย คอนซัลติ้ง 1992 จำกัด

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Tel. 0-3848-1197-8, 0-3876-3031-2 Fax : 0-3848-2095 E-mail : marketing@etc1992.com



TESTING
No.0159

Test Report

Request No : W6802377, W 6804199
Report No : 6803-0290-1, 6804-1506

Customer : Amata City Rayong Co.,Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**

Sampling Source : หัวขุไทร** Sample No : W 68021074, W 68040599
Sample Name : บริเวณค่ายกั้นน้ำในนิคมฯ (W2)** Sampling Date : 15/02/2025, 07/04/2025**
Sampling By : ETC** Sampling Time : 9:40 AM, 12:10 PM**
Sampling Method : Grab** Received Date : 17/02/2025, 08/04/2025
Tested Date : 17/02/2025 - 04/03/2025 Reported Date : 30/04/2025

Parameter	Unit	Method	Result	Standard ¹
Nitrogen (Nitrate) *	mg/L as NO ₃ ⁻	N Cadmium Reduction Method (SM:4500-NO ₃ -B)	1.35	≤5
pH (on site) *		Electrometric Method	6.7	5.0-9.0
Phenol *	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.019	≤0.005
Phosphorus*	mg/L as P	Ascorbic Acid Method (SM:4500-P B)	0.19	*
Sodium *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120 B)	56.3	*
Sulfate *	mg/L as SO ₄ ²⁻	Turbidimetric Method (SM:4500- SO ₄ 2- E)	80.8	-
Temperature *	°C	Laboratory and Field Method (SM:2550 B)	28	***

Physical Appearance : 1. Sample : yellowish, lightly SS

2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

- Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3
2./2 Sample No. W 68040599 : Sampling Date 07/04/2025 (12:10 PM); Tested Date 08/04/2025 - 12/04/2025
3. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater,
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4. Miss Nunnaphat Bakhuntod is Technical Management / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]
5. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad *
6. *** = คุณภาพของน้ำจะดีหรือไม่สูงกว่าคุณภาพตามธรรมชาติ ขึ้นอยู่กับค่าดัชนี, ** = These data are not included in the test report.

SUPPLEMENT TO TEST REPORT NO. 6803-0290



Examined By :
(Mis)

บริษัท อีสเทิร์นไทยคंसัลติง 1992 จำกัด

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Tel. 0-3848-1197-8, 0-3876-3031-2 Fax : 0-3848-2095 E-mail : marketing@etc1992.com



TESTING
No.0159

Test Report

Request No : W6802377, W 6804199
Report No : 6803-0290-1, 6804-1506

Customer : Amata City Rayong Co.,Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**

Sampling Source : หัวขุไทร** Sample No : W 68021074, W 68040599
Sample Name : บริเวณค่ายกั้นน้ำในนิคมฯ (W2)** Sampling Date : 15/02/2025, 07/04/2025**
Sampling By : ETC** Sampling Time : 9:40 AM, 12:10 PM**
Sampling Method : Grab** Received Date : 17/02/2025, 08/04/2025
Tested Date : 17/02/2025 - 04/03/2025 Reported Date : 30/04/2025

Parameter	Unit	Method	Result	Standard ¹
Total Dissolved Solids #	mg/L	Dried at 180 degree celsius (SM:2540C)	274	-
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	28	-
Turbidity *	NTU	Nephelometric Method (SM:2130B)	15.6	-

Physical Appearance : 1. Sample : yellowish, lightly SS

2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

- Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3
2./2 Sample No. W 68040599 : Sampling Date 07/04/2025 (12:10 PM); Tested Date 08/04/2025 - 12/04/2025
3. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater,
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4. Miss Nunnaphat Bakhuntod is Technical Management / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]
5. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad *
6. *** = คุณภาพของน้ำจะดีหรือไม่สูงกว่าคุณภาพตามธรรมชาติ ขึ้นอยู่กับค่าดัชนี, ** = These data are not included in the test report.

SUPPLEMENT TO TEST REPORT NO. 6803-0290



Examined By :
(Mis)

บริษัท อีสเทิร์นไทยคंसัลติง 1992 จำกัด

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Tel. 0-3848-1197, 0-3876-3031-2 Fax : 0-3848-2095
Website : http://www.etc1992.com E-mail : info@etc1992.com

Request No. W6802377

Report No. 6803-0290

TEST REPORT

Customer : Amata City Rayong Co.,Ltd.
Address : 7 Moo.3 T. Bowin , Sriracha , Chonburi 20230
Sampling Source : ห้วยคูไทร
Sample Name : บริเวณค่ายกั้นน้ำในนิคมฯ (W2)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 17/02/2025 - 04/03/2025

Sample No. : W 68021074
Sampling Date : 15/02/2025
Sampling Time : 9:40 AM
Received Date : 17/02/2025
Reported Date : 10/03/2025

Parameter	Unit	Method	Method Detection Limit	Result	Standard ¹⁾
Organochlorine Pesticides					
alpha-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.020	Not Detected	≤ 0.02
beta-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
gamma-BHC (Lindane)	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
delta-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Hepachlor	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.2
Aldrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.1
Hepachlor epoxide (isomer B)	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.2
trans-Chlordane	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Endosulfan I	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
cis-Chlordane	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Dieldrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.1
4,4'-DDE	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Endrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.050	Not Detected	****
Endosulfan II	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
4,4'-DDD	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Endrin aldehyde	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Endosulfan sulfate	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
4,4'-DDT	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 1.0
Endrin ketone	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Methoxychlor	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*

Physical Appearance : 1. Sample : yellowish, lightly SS
2. Container : Normal [PE 0.5 L(3 Bottle), PE 1.0 L, PE 1.8 L , G 1.0 L]

- Remark : 1./1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3
2.**** ต้องตรวจไม่พบตามวิธีตรวจสอบที่กำหนด
3. SM = Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24th Edition, 2023.
4. Parameter Outside The Scope of The Registration of Department of Industrial Water
5. Sampling By Mr. Parkpoom Buasawad



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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Website : http://www.etc1992.com E-mail : info@etc1992.com

Test Report

Request No : W6802377

Report No : 6803-0290

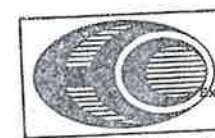
Customer : Amata City Rayong Co.,Ltd.
Address : 7 Moo.3, Bowin , Sriracha , Chonburi 20230
Sampling Source : ห้วยคูไทร
Sample Name : บริเวณค่ายกั้นน้ำในนิคมฯ (W2)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 17/02/2025 - 04/03/2025

Sample No : W 68021074
Sampling Date : 15/02/2025
Sampling Time : 9:40 AM
Received Date : 17/02/2025
Reported Date : 10/03/2025

Parameter	Unit	Method	Result	Standard ¹⁾
Ammonia Nitrogen #	mg/L	Spectrophotometer	0.59	≤0.5

Physical Appearance : 1. Sample : yellowish, lightly SS
2. Container : Normal [PE 0.5 L(3 Bottle), PE 1.0 L, PE 1.8 L , G 1.0 L]

- Remark : 1./1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3
2. # Tested by the office of Public Health and Environmental Technology Services Faculty of Public Health Mahidol University
3. Sampling By Mr. Parkpoom Buasawad



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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Tel. 0-3848-1197-8, 0-3876-3031-2 Fax : 0-3848-2095 E-mail : marketing@etc1992.com



TESTING
No.0159

Test Report

Request No : W6802377, W 6804199
Report No : 6803-0291-1, 6804-1507

Customer : Amata City Rayong Co.,Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**
Sampling Source : หัวขุไทร**
Sample Name : บริเวณใต้ฝายกั้นน้ำในนิคมฯ (W3)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 17/02/2025 - 04/03/2025

Sample No : W 68021075, W 68040600
Sampling Date : 15/02/2025, 07/04/2025**
Sampling Time : 9:50 AM, 12:00 PM**
Received Date : 17/02/2025, 08/04/2025
Reported Date : 30/04/2025

Parameter	Unit	Method	Result	Standard ¹⁾
Biochemical Oxygen Demand #/2	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	5.2	≤2
Chloride #	mg/L as Cl ₂	Argentometric Method (SM:4500-Cl- B)	243	*
Coliform Bacteria *	MPN:100 mL	MPN Test Method (SM:9221B)	3,300	≤20000
Conductivity *	10 ⁻⁶ S/cm	Laboratory Method (SM:2510B)	1,507	*
Cyanide *	mg/L as HCN	Distillation, Colorimetric Method (SM:4500 CN- C, E)	0.005	≤0.005
Dissolved Oxygen*	mg/L	Azide Modification Method (SM:4500 -O C)	7.4	≥4
Fecal Coliform Bacteria*	MPN:100 mL	MPN Test Method (SM:9221E)	2,300	≤4000
Manganese *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.85	≤1

Physical Appearance : 1. Sample : yellow, lightly SS
2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3
2./2 Sample No. W 68040600 : Sampling Date 07/04/2025 (12:00 PM): Tested Date 08/04/2025 - 12/04/2025
3. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023./ Parameter Outside The Scope of The Registration of Department of Industrial Works
4. Miss Nunnaphat Bakhuntod is Technical Management / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]
5. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad *

6. ** = คุณหมอน้ำจะต้องไม่สูงกว่าคุณหมอน้ำที่บันทึกไว้ 0.04 mg/L, ** = These data are not included in the report.

SUPPLEMENT TO TEST REPORT NO. 6803-0291



Examined By :
(Miss

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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TESTING
No.0159

Test Report

Request No : W6802377, W 6804199
Report No : 6803-0291-1, 6804-1507

Customer : Amata City Rayong Co.,Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**
Sampling Source : หัวขุไทร**
Sample Name : บริเวณใต้ฝายกั้นน้ำในนิคมฯ (W3)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 17/02/2025 - 04/03/2025

Sample No : W 68021075, W 68040600
Sampling Date : 15/02/2025, 07/04/2025**
Sampling Time : 9:50 AM, 12:00 PM**
Received Date : 17/02/2025, 08/04/2025
Reported Date : 30/04/2025

Parameter	Unit	Method	Result	Standard ¹⁾
Nitrogen (Nitrate)* /2	mg/L as NO ₃ - N	Cadmium Reduction Method (SM:4500 -NO3 -B)	5.15	≤5
pH (on site) *		Electrometric Method	7.0	5.0-9.0
Phenol *	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.013	≤0.005
Phosphorus*	mg/L as P	Ascorbic Acid Method (SM:4500 -P B)	0.70	*
Sodium *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120 B)	222	*
Sulfate *	mg/L as SO ₄ ²⁻	Turbidimetric Method (SM:4500 -SO42- E)	261	*
Temperature *	°C	Laboratory and Field Method (SM:2550 B)	28	***

Physical Appearance : 1. Sample : yellow, lightly SS
2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3
2./2 Sample No. W 68040600 : Sampling Date 07/04/2025 (12:00 PM): Tested Date 08/04/2025 - 12/04/2025
3. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023./ Parameter Outside The Scope of The Registration of Department of Industrial Works
4. Miss Nunnaphat Bakhuntod is Technical Management / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]
5. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad *

6. *** = คุณหมอน้ำจะต้องไม่สูงกว่าคุณหมอน้ำที่บันทึกไว้ 0.04 mg/L, *** = These data are not included in the report.

SUPPLEMENT TO TEST REPORT NO. 6803-0291



Examined By :
(

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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TESTING
No.0159

Test Report

Request No : W6802377, W 6804199
Report No : 6803-0291-1, 6804-1507

Customer : Amata City Rayong Co.,Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**
Sampling Source : หัวขลุ่ย**
Sample Name : บริเวณใต้สายกับน้ำในนิคมฯ (W3)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 17/02/2025 - 04/03/2025
Sample No : W 68021075, W 68040600
Sampling Date : 15/02/2025, 07/04/2025**
Sampling Time : 9:50 AM, 12:00 PM**
Received Date : 17/02/2025, 08/04/2025
Reported Date : 30/04/2025

Parameter	Unit	Method	Result	Standard ^{1/}
Total Dissolved Solids #	mg/L	Dried at 180 degree celsius (SM:2540C)	944	-
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	75	-
Turbidity *	NTU	Nephelometric Method (SM:2130B)	192	-

Physical Appearance : 1. Sample : yellow, lightly SS
2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994), Class 3
2. /2 Sample No. W 68040600 : Sampling Date 07/04/2025 (12:00 PM) : Tested Date 08/04/2025 - 12/04/2025
3. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023 / Parameter Outside The Scope of The Registration of Department of Industrial Works
4. Miss Nunnaphat Bakhuntod is Technical Management. / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]
5. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad *
6. ***** อุณหภูมิของน้ำจะต้องไม่สูงกว่าอุณหภูมิมาตรฐานที่กำหนดในองค์ประกอบของน้ำ **** = The

SUPPLEMENT TO TEST REPORT NO. 6803-0291



Examined By

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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โทร. 0-3848-1197, 0-3876-3031-2 แฟกซ์ : 0-3848-2095
เว็บไซต์ : http://www.etc1992.com อีเมล : info@etc1992.com



EASTERN THAI CONSULTING 1992 CO., LTD.

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Tel.: 0-3848-1197, 0-3876-3031-2 Fax : 0-3848-2095
Website : http://www.etc1992.com E-mail : info@etc1992.com

Request No. W6802377

Report No. 6803-0291

TEST REPORT

Customer : Amata City Rayong Co.,Ltd.
Address : 7 Moo.3 T. Bowin, Sriracha, Chonburi 20230
Sampling Source : หัวขลุ่ย
Sample No. : W 68021075
Sample Name : บริเวณใต้สายกับน้ำในนิคมฯ (W3)
Sampling Date : 15/02/2025
Sampling By : ETC
Sampling Time : 9:50 AM
Sampling Method : Grab
Received Date : 17/02/2025
Tested Date : 17/02/2025 - 04/03/2025
Reported Date : 10/03/2025

Parameter	Unit	Method	Method Detection Limit	Result	Standard ^{1/}
Organochlorine Pesticides					
alpha-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.020	Not Detected	≤ 0.02
beta-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
gamma-BHC (Lindane)	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
delta-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Heptachlor	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.2
Aldrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.1
Heptachlor epoxide (isomer B)	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.2
trans-Chlordane	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Endosulfan I	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
cis-Chlordane	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Dieldrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.1
4,4'-DDE	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Endrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.050	Not Detected	****
Endosulfan II	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
4,4'-DDD	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Endrin aldehyde	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Endosulfan sulfate	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
4,4'-DDT	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 1.0
Endrin ketone	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Methoxychlor	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-

Physical Appearance : 1. Sample : yellow, lightly SS
2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994), Class 3
2. **** ต้องตรวจไม่พบตามวิธีตรวจสอบที่กำหนด
3. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023
4. Parameter Outside The Scope of The Registration of Department of Industrial Works
5. Sampling By Mr. Parkpoom Buasawad



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY
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Test Report

Request No : W6802377

Report No : 6803-0291

Customer : Amata City Rayong Co.,Ltd.

Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230

Sampling Source : หัวขุไทร

Sample No : W 68021075

Sample Name : บริเวณใต้ฝายกั้นน้ำในนิคมฯ (W3)

Sampling Date : 15/02/2025

Sampling By : ETC

Sampling Time : 9:50 AM

Sampling Method : Grab

Received Date : 17/02/2025

Tested Date : 17/02/2025 - 04/03/2025

Reported Date : 10/03/2025

Parameter	Unit	Method	Result	Standard ¹
Ammonia Nitrogen #	mg/L	Spectrophotometer	0.48	≤0.5

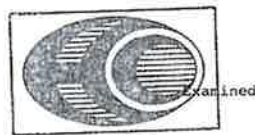
Physical Appearance : 1. Sample : yellow, lightly SS

2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3

2. # Tested by the office of Public Health and Environmental Technology Services Faculty of Public Health Mahidul University

3. Sampling By Mr. Parkpoom Buasawad



บริษัท อีสเทิร์นไทยคอนซัลตติ้ง 1992 จำกัด

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683 Moo 11 Sukhapibarn 8 Rd., Nongkham, Sriracha, Chonburi 20230
Tel. 0-3848-1197-8, 0-3876-3031-2 Fax : 0-3848-2095 E-mail : marketing@etc1992.com

Test Report

Request No : W6802377, W 6804199

Report No : 6803-0292-1, 6804-1508

Customer : Amata City Rayong Co.,Ltd.**

Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**

Sampling Source : หัวขุไทร**

Sample No : W 68021075, W 68040601

Sample Name : บริเวณบ้านวังศาลม่อนใต้ฝายกั้นน้ำในนิคมฯ (W4)**

Sampling Date : 15/02/2025, 07/04/2025**

Sampling By : ETC**

Sampling Time : 10:00 AM, 11:50 AM**

Sampling Method : Grab**

Received Date : 17/02/2025, 08/04/2025

Tested Date : 17/02/2025 - 04/03/2025

Reported Date : 30/04/2025

Parameter	Unit	Method	Result	Standard ¹
Biochemical Oxygen Demand #/2	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	3.0	≤2
Chloride #	mg/L as Cl ₂	Argentometric Method (SM:4500-Cl- B)	236	*
Coliform Bacteria *	MPN:100 mL	MPN Test Method (SM:9221B)	1,300	≤20000
Conductivity *	10 ⁻⁶ S/cm	Laboratory Method (SM:2510B)	1,337	*
Cyanide *	mg/L as HCN	Distillation, Colorimetric Method (SM:4500 CN- C, E)	0.001	≤0.005
Dissolved Oxygen*	mg/L	Azide Modification Method (SM:4500-O C)	7.3	≥4
Fecal Coliform Bacteria*	MPN:100 mL	MPN Test Method (SM:9221E)	330	≤4000
Manganese *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.27	≤1

Physical Appearance : 1. Sample : yellowish, lightly SS

2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3

2./2 Sample No. W 68040601 : Sampling Date 07/04/2025 (11:50 AM): Tested Date 08/04/2025 - 12/04/2025

3. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater,

APHA, AWWA, WEF, 24th Edition, 2023 / Parameter Outside The Scope of The Registration of Department of Industrial Works

4. Miss Nunnaphat Bakhuntod is Technical Management / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]

5. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad *

6. ***** ข้อมูลนี้เป็นข้อมูลเบื้องต้น ไม่สามารถนำมาใช้ประกอบการตัดสินใจได้ ***** These data are non laboratory data.

SUPPLEMENT TO TEST REPORT NO. 6803-0292



บริษัท อีสเทิร์นไทยคอนซัลตติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
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EASTERN THAI CONSULTING 1992 CO., LTD.

683 Moo 11 Sukhapibarn 8 Rd., Nongkham, Sriracha, Chonburi 20230
Tel: 0-3848-1197-8, 0-3876-3031-2 Fax: 0-3848-2095 E-mail: marketing@etc1992.com



TESTING
No.0159

Test Report

Request No : W6802377, W 6804199
Report No : 6803-0292-1, 6804-1508

Customer : Amata City Rayong Co.,Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**
Sampling Source : หัวภูไท** Sample No : W 68021076, W 68040601
Sample Name : บริเวณบ้านวังตาลม่อนใต้ฝ่ายถนนในนิคมฯ (W4)** Sampling Date : 15/02/2025, 07/04/2025**
Sampling By : ETC** Sampling Time : 10:00 AM, 11:50 AM**
Sampling Method : Grab** Received Date : 17/02/2025, 08/04/2025
Tested Date : 17/02/2025 - 04/03/2025 Reported Date : 30/04/2025

Parameter	Unit	Method	Result	Standard ¹
Nitrogen (Nitrate)*	mg/L as NO ₃ ⁻	N Cadmium Reduction Method (SM:4500-NO ₃ -B)	2.04	≤5
pH (on site) *		Electrometric Method	8.2	5.0-9.0
Phenol *	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.012	≤0.005
Phosphorus*	mg/L as P	Ascorbic Acid Method (SM:4500-P B)	< 0.15	-
Sodium *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120 B)	159	-
Sulfate *	mg/L as SO ₄ ²⁻	Turbidimetric Method (SM:4500 -SO ₄ ²⁻ E)	273	-
Temperature *	°C	Laboratory and Field Method (SM:2550 B)	30	5***

Physical Apperance : 1. Sample : yellowish, lightly SS

2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994), Class 3

2./2 Sample No. W 68040601 : Sampling Date 07/04/2025 (11:50 AM): Tested Date 08/04/2025 - 12/04/2025

3. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater,

APHA, AWWA, WEF, 24th Edition, 2023./ Parameter Outside The Scope of The Registration of Department of Industrial Works

4. Miss Nunnaphat Bakhuntod is Technical Management. / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]

5. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad *

6. *** = อุณหภูมิของน้ำจะสูงเกินไปสูงกว่าอุณหภูมิมาตรฐานที่กำหนดไว้ 3 องศาเซลเซียส. ** = These

SUPPLEMENT TO TEST REPORT NO. 6803-0292



บริษัท อีสเทิร์นไทยคंसัลติง 1992 จำกัด

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EASTERN THAI CONSULTING 1992 CO., LTD.

683 Moo 11 Sukhapibarn 8 Rd., Nongkham, Sriracha, Chonburi 20230
Tel: 0-3848-1197-8, 0-3876-3031-2 Fax: 0-3848-2095 E-mail: marketing@etc1992.com



TESTING
No.0159

Test Report

Request No : W6802377, W 6804199
Report No : 6803-0292-1, 6804-1508

Customer : Amata City Rayong Co.,Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**
Sampling Source : หัวภูไท** Sample No : W 68021076, W 68040601
Sample Name : บริเวณบ้านวังตาลม่อนใต้ฝ่ายถนนในนิคมฯ (W4)** Sampling Date : 15/02/2025, 07/04/2025**
Sampling By : ETC** Sampling Time : 10:00 AM, 11:50 AM**
Sampling Method : Grab** Received Date : 17/02/2025, 08/04/2025
Tested Date : 17/02/2025 - 04/03/2025 Reported Date : 30/04/2025

Parameter	Unit	Method	Result	Standard ¹
Total Dissolved Solids #	mg/L	Dried at 180 degree celsius (SM:2540C)	848	-
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	14	-
Turbidity *	NTU	Nephelometric Method (SM:2130B)	7.62	-

Physical Apperance : 1. Sample : yellowish, lightly SS

2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994), Class 3

2./2 Sample No. W 68040601 : Sampling Date 07/04/2025 (11:50 AM): Tested Date 08/04/2025 - 12/04/2025

3. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater,

APHA, AWWA, WEF, 24th Edition, 2023./ Parameter Outside The Scope of The Registration of Department of Industrial Works

4. Miss Nunnaphat Bakhuntod is Technical Management. / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]

5. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad *

6. *** = อุณหภูมิของน้ำจะสูงเกินไปสูงกว่าอุณหภูมิมาตรฐานที่กำหนดไว้ 3 องศาเซลเซียส. ** = These

SUPPLEMENT TO TEST REPORT NO. 6803-0292



บริษัท อีสเทิร์นไทยคंसัลติง 1992 จำกัด

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ISO/IEC 17025

Request No. W6802377

Report No. 6803-0292

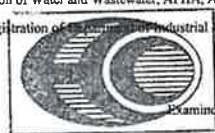
TEST REPORT

Customer : Amata City Rayong Co.,Ltd.
Address : 7 Moo.3 T. Bowin, Sriracha, Chonburi 20230
Sampling Source : ห้วยไทร
Sample Name : บริเวณบึงวังตาลมอนใต้ฝายกั้นน้ำในนิคมฯ (W4)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 17/02/2025 - 04/03/2025
Sample No. : W 68021076
Sampling Date : 15/02/2025
Sampling Time : 10:00 AM
Received Date : 17/02/2025
Reported Date : 10/03/2025

Parameter	Unit	Method	Method Detection Limit	Result	Standard ¹
Organochlorine Pesticides					
alpha-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.020	Not Detected	≤ 0.02
beta-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	•
gamma-BHC (Lindane)	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	•
delta-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	•
Heptachlor	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.2
Aldrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.1
Heptachlor epoxide (isomer B)	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.2
trans-Chlordane	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	•
Endosulfan I	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	•
cis-Chlordane	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	•
Dieldrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.1
4,4'-DDE	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	•
Endrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.050	Not Detected	****
Endosulfan II	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	•
4,4'-DDD	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	•
Endrin aldehyde	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	•
Endosulfan sulfate	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	•
4,4'-DDT	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 1.0
Endrin ketone	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	•
Methoxychlor	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	•

Physical Appearance : 1. Sample : yellowish, lightly SS
2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994), Class 3
2. **** ต้องตรวจไม่พบสารที่ตรวจสอบที่กำหนด
3. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.
4. Parameter Outside The Scope of The Regulation of Polluting Industrial Works
5. Sampling By Mr. Parkpoom Buasawad



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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ISO/IEC 17025

Test Report

Request No : W6802377

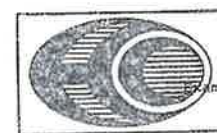
Report No : 6803-0292

Customer : Amata City Rayong Co.,Ltd.
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230
Sampling Source : ห้วยไทร
Sample Name : บริเวณบึงวังตาลมอนใต้ฝายกั้นน้ำในนิคมฯ (W4)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 17/02/2025 - 04/03/2025
Sample No : W 68021076
Sampling Date : 15/02/2025
Sampling Time : 10:00 AM
Received Date : 17/02/2025
Reported Date : 10/03/2025

Parameter	Unit	Method	Result	Standard ¹
Ammonia Nitrogen #	mg/L	Spectrophotometer	0.36	≤ 0.5

Physical Appearance : 1. Sample : yellowish, lightly SS
2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994), Class 3
2. # Tested by the office of Public Health and Environmental Technology Services Faculty of Public Health Mahidol University
3. Sampling By Mr. Parkpoom Buasawad



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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EASTERN THAI CONSULTING 1992 CO., LTD.

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Tel. 0-3848-1197-8, 0-3876-3031-2 Fax : 0-3848-2095 E-mail : marketing@etc1992.com



TESTING
No.0159

Test Report

Request No : W6805073
Report No : 6805-1240

Customer : Amata City Rayong Co.,Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**
Sampling Source : หัวขุไทร** Sample No : W 68050233
Sample Name : บริเวณบ้านหนองทองเหนือฝายกั้นน้ำในนิคมฯ (W1)** Sampling Date : 03/05/2025**
Sampling By : ETC** Sampling Time : 10:10 AM**
Sampling Method : Grab** Received Date : 05/05/2025
Tested Date : 05/05/2025 - 16/05/2025 Reported Date : 21/05/2025

Parameter	Unit	Method	Result	Standard ¹⁾
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	6.2	≤2
Chloride *	mg/L as Cl ₂	Argentometric Method (SM:4500-Cl- B)	27.4	-
Coliform Bacteria *	MPN:100 mL	MPN Test Method (SM:9221B)	92,000	≤20000
Conductivity *	10 ⁻⁶ S/cm	Laboratory Method (SM:2510B)	276	-
Cyanide *	mg/L as HCN	Distillation, Colorimetric Method (SM:4500 CN- C, E)	0.001	≤0.005
Dissolved Oxygen*	mg/L	Azide Modification Method (SM:4500 -O C)	6.8	≥4
Fecal Coliform Bacteria*	MPN:100 mL	MPN Test Method (SM:9221E)	13,000	≤4000
Manganese *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.82	≤1

Physical Appearance : 1. Sample : yellow, lightly SS
2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994), Class 3
2. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023/** = These data are non laboratory data.
3. Miss Nunnaphat Bakhuntod is Technical Management / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]
4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang*
5. *** = คุณหมูนีของน้ำจะคั่งไม่สูงกว่าคุณหมูนีตามธรรมชาติ เกิน 3 องศาเซลเซียส
6. Parameter Outside The Scope of The Registration of Department of Industrial Works



บริษัท อีสท์ไธเนคคองซัลติง 1992 จำกัด

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Tel. 0-3848-1197-8, 0-3876-3031-2 Fax : 0-3848-2095 E-mail : marketing@etc1992.com



TESTING
No.0159

Test Report

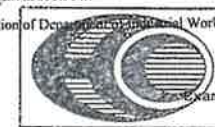
Request No : W6805073
Report No : 6805-1240

Customer : Amata City Rayong Co.,Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**
Sampling Source : หัวขุไทร** Sample No : W 68050233
Sample Name : บริเวณบ้านหนองทองเหนือฝายกั้นน้ำในนิคมฯ (W1)** Sampling Date : 03/05/2025**
Sampling By : ETC** Sampling Time : 10:10 AM**
Sampling Method : Grab Received Date : 05/05/2025
Tested Date : 05/05/2025 - 16/05/2025 Reported Date : 21/05/2025

Parameter	Unit	Method	Result	Standard ¹⁾
Nitrogen (Nitrate) *	mg/L as NO ₃ - N	Cadmium Reduction Method (SM:4500 -NO ₃ -B)	1.49	≤3
pH (on site) *		Electrometric Method	7.2	5.0-9.0
Phenol *	mg/L	Distillation, Direct Photometric Method (SM:5530B, D)	< 0.005	≤0.005
Phosphorus*	mg/L as P	Ascorbic Acid Method (SM:4500 -P B)	0.17	-
Sodium *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120 B)	20.2	-
Sulfate *	mg/L as SO ₄ ²⁻	Turbidimetric Method (SM:4500 -SO ₄ ²⁻ E)	28.9	-
Temperature *	°C	Laboratory and Field Method (SM:2550 B)	30	***

Physical Appearance : 1. Sample : yellow, lightly SS
2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994), Class 3
2. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023/** = These data are non laboratory data.
3. Miss Nunnaphat Bakhuntod is Technical Management / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]
4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang*
5. *** = คุณหมูนีของน้ำจะคั่งไม่สูงกว่าคุณหมูนีตามธรรมชาติ เกิน 3 องศาเซลเซียส
6. Parameter Outside The Scope of The Registration of Department of Industrial Works



บริษัท อีสท์ไธเนคคองซัลติง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
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EASTERN THAI CONSULTING 1992 CO., LTD.

683 Moo 11 Sukhapibarn 8 Rd., Nongkham, Sriracha, Chonburi 20230
Tel. 0-3848-1197-8, 0-3876-3031-2 Fax : 0-3848-2095 E-mail : marketing@etc1992.com



TESTING
No.0159

Test Report

Request No : W6805073
Report No : 6805-1240

Customer : Amata City Rayong Co.,Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**
Sampling Source : หัวขุไทร**
Sample Name : บริเวณบ้านหนองคองเหนือฝายกั้นน้ำในนิคมฯ (W1)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 05/05/2025 - 16/05/2025

Sample No : W 68050233
Sampling Date : 03/05/2025**
Sampling Time : 10:10 AM**
Received Date : 05/05/2025
Reported Date : 21/05/2025

Parameter	Unit	Method	Result	Standard ¹
Total Dissolved Solids #	mg/L	Dried at 180 degree celsius (SM:2540C)	200	*
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	68	*
Turbidity *	NTU	Nephelometric Method (SM:2130B)	126	*

Physical Appearance : 1. Sample : yellow, lightly SS
2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /I Surface Water Quality Standards Notification of the National Environment Board No. 8 BE, 2537 (1994), Class 3
2. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023 /** = These data are non laboratory data.
3. Miss Nunnaphat Bakhuntod is Technical Management. / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]
4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Suphaterk Phatklang*
5. *** = อุณหภูมิของน้ำจะต้องไม่สูงกว่าอุณหภูมิมาตรฐานชาติ เกิน 3 องศาเซลเซียส
6. Parameter Outside The Scope of The Registration of Department of Industrial Works



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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บริษัท อีสเทิร์น ไทย คอนซัลติ้ง 1992 จำกัด

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โทร. 0-3848-1197, 0-3876-3031-2 แฟกซ์ : 0-3848-2095
เว็บไซต์ : http://www.etc1992.com อีเมล : info@etc1992.com



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Tel. 0-3848-1197, 0-3876-3031-2 Fax : 0-3848-2095
Website : http://www.etc1992.com E-mail : info@etc1992.com

Request No. W6805073

Report No. 6805-1240

TEST REPORT

Customer : Amata City Rayong Co.,Ltd.
Address : 7 Moo.3, Bowin, Sriracha, Chonburi 20230
Sampling Source : หัวขุไทร
Sample No. : W 68050233
Sample Name : บริเวณบ้านหนองคองเหนือฝายกั้นน้ำในนิคมฯ (W1)
Sampling Date : 03/05/2025
Sampling By : ETC
Sampling Time : 10:10 AM
Sampling Method : Grab
Received Date : 05/05/2025
Tested Date : 05/05/2025 - 16/05/2025
Reported Date : 21/05/2025

Parameter	Unit	Method	Method Detection Limit	Result	Standard ¹
Organochlorine Pesticides					
alpha-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.020	Not Detected	≤ 0.02
beta-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
gamma-BHC (Lindane)	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
delta-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Heptachlor	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.2
Aldrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.1
Heptachlor epoxide (isomer B)	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.2
trans-Chlordane	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Endosulfan I	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
cis-Chlordane	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Dieldrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.1
4,4'-DDE	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Endrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.050	Not Detected	***
Endosulfan II	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
4,4'-DIDD	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Endrin aldehyde	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Endosulfan sulfate	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
4,4'-DIDT	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 1.0
Endrin ketone	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Methoxychlor	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*

Physical Appearance : 1. Sample : yellow, lightly SS
2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /I Surface Water Quality Standards Notification of the National Environment Board No. 8 BE, 2537 (1994), Class 3
2.*** ต้องตรวจไม่พบตามวิธีตรวจสอบที่กำหนด
3. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.
4. Parameter Outside The Scope of The Registration of Department of Industrial Works
5. Sampling By Mr. Suphaterk Phatklang



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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Website : http://www.etc1992.com E-mail : info@etc1992.com

Test Report

Request No : W6805073

Report No : 6805-1240

Customer : Amata City Rayong Co.,Ltd.

Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230

Sampling Source : หัวอุทธร

Sample No : W 68050233

Sample Name : บริเวณบ้านหนองตองเหนือสายน้ำในนิคมฯ (W1)

Sampling Date : 03/05/2025

Sampling By : ETC

Sampling Time : 10:10 AM

Sampling Method : Grab

Received Date : 05/05/2025

Tested Date : 05/05/2025 - 16/05/2025

Reported Date : 21/05/2025

Parameter	Unit	Method	Result	Standard ¹
Ammonia Nitrogen #	mg/L	Spectrophotometer	0.50	≤0.5

Physical Appearance : 1. Sample : yellow, lightly SS

2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3

2. # Tested by the office of Public Health and Environmental Technology Services Faculty of Public Health Mahidol University

3. Sampling By Mr. Supharerk Phatklang



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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ACCREDITED
ISO 9001 / ISO 14001

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Test Report

Request No : W6805073

Report No : 6805-1241

Customer : Amata City Rayong Co.,Ltd.**

Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**

Sampling Source : หัวอุทธร**

Sample No : W 68050234

Sample Name : บริเวณสายน้ำในนิคมฯ (W2)**

Sampling Date : 03/05/2025**

Sampling By : ETC**

Sampling Time : 10:00 AM**

Sampling Method : Grab**

Received Date : 05/05/2025

Tested Date : 05/05/2025 - 16/05/2025

Reported Date : 21/05/2025

Parameter	Unit	Method	Result	Standard ¹
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	7.2	≤2
Chloride *	mg/L as Cl ₂	Argentometric Method (SM:4500-Cl- B)	20.2	*
Coliform Bacteria *	MPN:100 mL	MPN Test Method (SM:9221B)	54,000	≤20000
Conductivity *	10 ⁻⁶ S/cm	Laboratory Method (SM:2510B)	345	*
Cyanide *	mg/L as HCN	Distillation, Colorimetric Method (SM:4500 CN- C, E)	0.001	≤0.005
Dissolved Oxygen*	mg/L	Azide Modification Method (SM:4500 -O C)	4.9	≥4
Focal Coliform Bacteria*	MPN:100 mL	MPN Test Method (SM:9221E)	7,900	≤4000
Manganese *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.67	≤1

Physical Appearance : 1. Sample : yellow, turbid

2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3

2. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater,

APHA, AWWA, WEF, 24th Edition, 2023./** = These data are non laboratory data.

3. Miss Nunnaphal Bakhuntod is Technical Management. / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]

4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang*

5. *** = ข้อมูลภูมิของน้ำจะต้องไม่สูงกว่าข้อมูลภูมิตามธรรมชาติ เกิน 3 ของค่าเฉลี่ย

6. Parameter Outside The Scope of The Registration of Department of Industrial Works



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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TESTING
No.0159

Test Report

Request No : W6805073
Report No : 6805-1241

Customer : Amata City Rayong Co.,Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**
Sampling Source : ห้วยไทร**
Sample Name : บริเวณฝายกั้นน้ำในนิคมฯ (W2)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 05/05/2025 - 16/05/2025

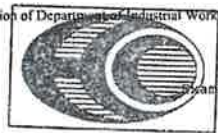
Sample No : W 68050234
Sampling Date : 03/05/2025**
Sampling Time : 10:00 AM**
Received Date : 05/05/2025
Reported Date : 21/05/2025

Parameter	Unit	Method	Result	Standard ¹
Nitrogen (Nitrate) *	mg/L as NO ₃ -N	Cadmium Reduction Method (SM:4500-NO ₃ -B)	1.08	≤5
pH (on site) *		Electrometric Method	6.9	5.0-9.0
Phenol *	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.018	≤0.005
Phosphorus*	mg/L as P	Ascorbic Acid Method (SM:4500-P B)	0.57	*
Sodium *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120 B)	19.9	*
Sulfate *	mg/L as SO ₄ ²⁻	Turbidimetric Method (SM:4500-SO ₄ ²⁻ -E)	81.2	*
Temperature *	°C	Laboratory and Field Method (SM:2550 B)	31	25***

Physical Appearance : 1. Sample : yellow, turbid

2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L , G 1.0 L]

- Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3
2. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023./** = These data are non laboratory data.
3. Miss Nunnaphat Bakhuntod is Technical Management. / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]
4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang*
5. ๓*** = อุณหภูมิของน้ำจะต้องไม่สูงกว่าอุณหภูมิตามธรรมชาติ เกิน 3 องศาเซลเซียส
6. Parameter Outside The Scope of The Registration of Department of Industrial Works



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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TESTING
No.0159

Test Report

Request No : W6805073
Report No : 6805-1241

Customer : Amata City Rayong Co.,Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**
Sampling Source : ห้วยไทร**
Sample Name : บริเวณฝายกั้นน้ำในนิคมฯ (W2)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 05/05/2025 - 16/05/2025

Sample No : W 68050234
Sampling Date : 03/05/2025**
Sampling Time : 10:00 AM**
Received Date : 05/05/2025
Reported Date : 21/05/2025

Parameter	Unit	Method	Result	Standard ¹
Total Dissolved Solids #	mg/L	Dried at 180 degree celsius (SM:2540C)	310	*
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	130	*
Turbidity *	NTU	Nephelometric Method (SM:2130B)	290	*

Physical Appearance : 1. Sample : yellow, turbid

2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L , G 1.0 L]

- Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3
2. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023./** = These data are non laboratory data.
3. Miss Nunnaphat Bakhuntod is Technical Management. / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]
4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang*
5. ๓*** = อุณหภูมิของน้ำจะต้องไม่สูงกว่าอุณหภูมิตามธรรมชาติ เกิน 3 องศาเซลเซียส
6. Parameter Outside The Scope of The Registration of Department of Industrial Works



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Website : http://www.etc1992.com E-mail : info@etc1992.com

Request No. W6805073

Report No. 6805-1241

TEST REPORT

Customer : Amata City Rayong Co.,Ltd.
Address : 7 Moo.3, Bowin, Sriracha, Chonburi 20230
Sampling Source : ห้วยคูไทร Sample No. : W 68050234
Sample Name : บริเวณฝายกั้นน้ำในนิคมฯ (W2) Sampling Date : 03/05/2025
Sampling By : ETC Sampling Time : 10:00 AM
Sampling Method : Grab Received Date : 05/05/2025
Tested Date : 05/05/2025 - 16/05/2025 Reported Date : 21/05/2025

Parameter	Unit	Method	Method Detection Limit	Result	Standard ¹⁾
Organochlorine Pesticides					
alpha-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.020	Not Detected	≤ 0.02
beta-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
gamma-BHC (Lindane)	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
delta-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Heptachlor	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.2
Aldrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.1
Heptachlor epoxide (isomer B)	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.2
trans-Chlordane	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Endosulfan I	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
cis-Chlordane	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Dieldrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.1
4,4'-DDE	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Endrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.050	Not Detected	****
Endosulfan II	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
4,4'-DDD	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Endrin aldehyde	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Endosulfan sulfate	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
4,4'-DDT	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 1.0
Endrin ketone	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Methoxychlor	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-

Physical Appearance : 1. Sample : yellow, turbid
2. Container : Normal [PE 0.5 L(3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3
2. **** ต้องตรวจไม่พบตามวิธีตรวจสอบที่กำหนด
3. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.
4. Parameter Outside The Scope of The Registration of Department of Industrial Works
5. Sampling By Mr. Supharerk Phatklung



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683 หมู่ 11 อ.สุราษฎร์ธานี 8 ต.หนองจาม อ.ศรีราชา จ.ชลบุรี 20230
โทร. 0-3848-1197, 0-3876-3031-2 แฟกซ์ : 0-3848-2095
เว็บไซต์ : http://www.etc1992.com อี-เมล : info@etc1992.com



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Tel. 0-3848-1197, 0-3876-3031-2 Fax : 0-3848-2095
Website : http://www.etc1992.com E-mail : info@etc1992.com

Test Report

Request No : W6805073

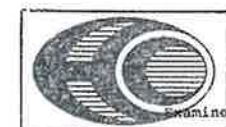
Report No : 6805-1241

Customer : Amata City Rayong Co.,Ltd.
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230
Sampling Source : ห้วยคูไทร Sample No : W 68050234
Sample Name : บริเวณฝายกั้นน้ำในนิคมฯ (W2) Sampling Date : 03/05/2025
Sampling By : ETC Sampling Time : 10:00 AM
Sampling Method : Grab Received Date : 05/05/2025
Tested Date : 05/05/2025 - 16/05/2025 Reported Date : 21/05/2025

Parameter	Unit	Method	Result	Standard ¹⁾
Ammonia Nitrogen #	mg/L	Spectrophotometer	2.28	≤0.5

Physical Appearance : 1. Sample : yellow, turbid
2. Container : Normal [PE 0.5 L(3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3
2. # Tested by the office of Public Health and Environmental Technology Services Faculty of Public Health Mahidol University
3. Sampling By Mr. Supharerk Phatklung



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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TESTING
No.0159

Test Report

Request No : W6805073
Report No : 6805-1242

Customer : Amata City Rayong Co.,Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**
Sampling Source : หัวขุไพร**
Sample Name : บริเวณใต้ฝายกั้นน้ำในนิคมฯ (W3)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 05/05/2025 - 16/05/2025

Sample No : W 68050235
Sampling Date : 03/05/2025**
Sampling Time : 9:40 AM**
Received Date : 05/05/2025
Reported Date : 21/05/2025

Parameter	Unit	Method	Result	Standard ¹⁾
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	5.2	≤2
Chloride #	mg/L as Cl ₂	Argentometric Method (SM:4500-Cl-B)	63.6	-
Coliform Bacteria *	MPN:100 mL	MPN Test Method (SM:9221B)	92,000	≤20000
Conductivity *	10 ⁻⁶ S/cm	Laboratory Method (SM:2510B)	636	-
Cyanide *	mg/L as BCN	Distillation, Colorimetric Method (SM:4500 CN- C, E)	0.001	≤0.005
Dissolved Oxygen*	mg/L	Azide Modification Method (SM:4500 -O C)	5.8	≥4
Fecal Coliform Bacteria*	MPN:100 mL	MPN Test Method (SM:9221E)	54,000	≤4000
Manganese *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.68	≤1

Physical Appearance : 1. Sample: yellow, turbid
2. Container: Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

- Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3
2. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023./** = These data are non laboratory data.
3. Miss Nunnaphat Bakhuntod is Technical Management. / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]
4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharek Phaklang*
5. *** = อุณหภูมิของน้ำจะต้องไม่สูงกว่าอุณหภูมิมาตรฐานชาติ เกิน 3 องศาเซลเซียส
6. Parameter Outside The Scope of The Registration of Department of Industrial Works



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TESTING
No.0159

Test Report

Request No : W6805073
Report No : 6805-1242

Customer : Amata City Rayong Co.,Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**
Sampling Source : หัวขุไพร**
Sample Name : บริเวณใต้ฝายกั้นน้ำในนิคมฯ (W3)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 05/05/2025 - 16/05/2025

Sample No : W 68050235
Sampling Date : 03/05/2025**
Sampling Time : 9:40 AM**
Received Date : 05/05/2025
Reported Date : 21/05/2025

Parameter	Unit	Method	Result	Standard ¹⁾
Nitrogen (Nitrate) *	mg/L as NO ₃ ⁻	Cadmium Reduction Method (SM:4500 -NO ₃ -B)	2.45	≤5
pH (on site) *		Electrometric Method	7.4	5.0-9.0
Phenol *	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.052	≤0.005
Phosphorus*	mg/L as P	Ascorbic Acid Method (SM:4500 -P B)	0.27	-
Sodium *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120 B)	55.8	-
Sulfate *	mg/L as SO ₄ ²⁻	Turbidimetric Method (SM:4500 -SO ₄ 2- E)	141	-
Temperature *	°C	Laboratory and Field Method (SM:2550 B)	30	***

Physical Appearance : 1. Sample: yellow, turbid
2. Container: Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

- Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) . Class 3
2. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023./** = These data are non laboratory data.
3. Miss Nunnaphat Bakhuntod is Technical Management. / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]
4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharek Phaklang*
5. *** = อุณหภูมิของน้ำจะต้องไม่สูงกว่าอุณหภูมิมาตรฐานชาติ เกิน 3 องศาเซลเซียส
6. Parameter Outside The Scope of The Registration of Department of Industrial Works



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TESTING
No.0159

Test Report

Request No : W6805073
Report No : 6805-1242

Customer : Amata City Rayong Co.,Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**
Sampling Source : หัวขุไทร**
Sample Name : บริเวณใต้ท้ายคันน้ำในนิคมฯ (W3)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 05/05/2025 - 16/05/2025

Sample No : W 68050235
Sampling Date : 03/05/2025**
Sampling Time : 9:40 AM**
Received Date : 05/05/2025
Reported Date : 21/05/2025

Parameter	Unit	Method	Result	Standard ¹
Total Dissolved Solids #	mg/L	Dried at 180 degree celsius (SM:2540C)	480	*
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	188	*
Turbidity *	NTU	Nephelometric Method (SM:2130B)	329	*

Physical Apperance : 1. Sample : yellow, turbid
2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

- Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3
2. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023/** = These data are non laboratory data.
3. Miss Nunnaphat Bakhundit is Technical Management / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]
4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang*
5. *** = คุณหมื่นกมลจะตั้งไม่สูงกว่าอุณหภูมิตามธรรมชาติ เกิน 3 องศาเซลเซียส
6. Parameter Outside The Scope of The Registration of Department of Industrial Works



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เว็บไซต์ : http://www.etc1992.com อีเมล : info@etc1992.com



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Tel. 0-3848-1197, 0-3876-3031-2 Fax : 0-3848-2095
Website : http://www.etc1992.com E-mail : info@etc1992.com

Request No. W6805073

Report No. 6805-1242

TEST REPORT

Customer : Amata City Rayong Co.,Ltd.
Address : 7 Moo.3, Bowin , Sriracha , Chonburi 20230
Sampling Source : หัวขุไทร
Sample Name : บริเวณใต้ท้ายคันน้ำในนิคมฯ (W3)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 05/05/2025 - 16/05/2025

Sample No. : W 68050235
Sampling Date : 03/05/2025
Sampling Time : 9:40 AM
Received Date : 05/05/2025
Reported Date : 21/05/2025

Parameter	Unit	Method	Method Detection Limit	Result	Standard ¹
Organochlorine Pesticides					
alpha-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.020	Not Detected	≤ 0.02
beta-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
gamma-BHC (Lindane)	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
delta-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Heptachlor	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.2
Aldrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.1
Heptachlor epoxide (isomer B)	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.2
trans-Chlordane	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Endosulfan I	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
cis-Chlordane	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Dieldrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.1
4,4'-DDE	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Endrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.050	Not Detected	****
Endosulfan II	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
4,4'-DDD	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Endrin aldehyde	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Endosulfan sulfate	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
4,4'-DDT	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 1.0
Endrin ketone	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*
Methoxychlor	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	*

Physical Apperance : 1. Sample : yellow, turbid
2. Container : Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

- Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3
2. **** ต้องตรวจไม่พบตามวิธีตรวจสอบที่กำหนด
3. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.
4. Parameter Outside The Scope of The Registration of Department of Industrial Works
5. Sampling By Mr. Supharerk Phatklang



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เว็บไซต์ : http://www.etc1992.com อีเมล : info@etc1992.com



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Tel. 0-3848-1197, 0-3876-3031-2 Fax : 0-3848-2095
Website : http://www.etc1992.com E-mail : info@etc1992.com

Test Report

Request No : W6805073

Report No : 6805-1242

Customer : Amata City Rayong Co., Ltd.
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230
Sampling Source : ห้วยคูไทร
Sample Name : บริเวณใต้ฝายกั้นน้ำในนิคมฯ (W3)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 05/05/2025 - 16/05/2025

Sample No : W 68050235
Sampling Date : 03/05/2025
Sampling Time : 9:40 AM
Received Date : 05/05/2025
Reported Date : 21/05/2025

Parameter	Unit	Method	Result	Standard ¹
Ammonia Nitrogen #	mg/L	Spectrophotometer	2.35	≤0.5

Physical Appearance : 1. Sample: yellow, turbid

2. Container: Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /I Surface Water Quality Standards Notification of the National Environment Board No. 8 BE, 2537 (1994), Class 3

2. # Tested by the office of Public Health and Environmental Technology Services Faculty of Public Health Mahidol University

3. Sampling By Mr. Supharerk Phatklang



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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Test Report

Request No : W6805073

Report No : 6805-1243

Customer : Amata City Rayong Co., Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**
Sampling Source : ห้วยคูไทร**
Sample Name : บริเวณบ้านวังศาลม่อนใต้ฝายกั้นน้ำในนิคมฯ (W4)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 05/05/2025 - 16/05/2025

Sample No : W 68050236
Sampling Date : 03/05/2025**
Sampling Time : 9:30 AM**
Received Date : 05/05/2025
Reported Date : 21/05/2025

Parameter	Unit	Method	Result	Standard ¹
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	6.1	≤2
Chloride #	mg/L as Cl ₂	Argentometric Method (SM:4500-Cl- B)	158	-
Coliform Bacteria *	MPN:100 mL	MPN Test Method (SM:9221B)	54,000	≤20000
Conductivity *	10 ⁻⁶ S/cm	Laboratory Method (SM:2510B)	1,081	-
Cyanide *	mg/L as HCN	Distillation, Colorimetric Method (SM:4500 CN- C, E)	0.001	≤0.005
Dissolved Oxygen*	mg/L	Azide Modification Method (SM:4500 -O C)	7.2	≥4
Fecal Coliform Bacteria*	MPN:100 mL	MPN Test Method (SM:9221E)	24,000	≤4000
Manganese *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.46	≤1

Physical Appearance : 1. Sample: yellow, turbid

2. Container: Normal [PE 0.5 L (3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /I Surface Water Quality Standards Notification of the National Environment Board No. 8 BE, 2537 (1994), Class 3

2. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater,

APHA, AWWA, WEF, 24th Edition, 2023./** = These data are non laboratory data.

3. Miss Nunnaphat Bakhuntod is Technical Management. / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]

4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang

5. *** = คุณหมื่นของน้ำจะต้องไม่สูงกว่าคุณหมื่นตามบรรทัดที่ 3 ของค่าเฉลี่ย

6. Parameter Outside The Scope of The Registration of Department of Industrial Works



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TESTING
No.0159

Test Report

Request No : W6805073
Report No : 6805-1243

Customer : Amata City Rayong Co.,Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**
Sampling Source : หัวขุโทร**
Sample Name : บริเวณบ้านวังศาลม่อนได้ฝ่ายกันน้ำในนิคมฯ (W4)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 05/05/2025 - 16/05/2025

Sample No : W 68050236
Sampling Date : 03/05/2025**
Sampling Time : 9:30 AM**
Received Date : 05/05/2025
Reported Date : 21/05/2025

Parameter	Unit	Method	Result	Standard ¹
Nitrogen (Nitrate) *	mg/L as NO ₃ -	N Cadmium Reduction Method (SM:4500-NO ₃ -B)	4.29	≤5
pH (on site) *		Electrometric Method	7.8	5.0-9.0
Phenol *	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.044	≤0.005
Phosphorus*	mg/L as P	Ascorbic Acid Method (SM:4500-P B)	0.21	-
Sodium *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120 B)	102	-
Sulfate *	mg/L as SO ₄ ²⁻	Turbidimetric Method (SM:4500 -SO ₄ ²⁻ -E)	248	-
Temperature *	°C	Laboratory and Field Method (SM:2550 B)	31	๓***

Physical Apperance : 1. Sample: yellow, turbid

2. Container: Normal [PE 0.5 L(3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3

2. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater,
APHA, AWWA, WEF, 24th Edition, 2023./** = These data are non laboratory data.

3. Miss Nunnaphat Bakhuntod is Technical Management. / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]

4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharek Phakkiang*

5. ๓*** = อุณหภูมิของน้ำจะต้องไม่สูงกว่าอุณหภูมิมาตรฐานชาติ เกิน 3 องศาเซลเซียส

6. Parameter Outside The Scope of The Registration of Department of Industrial Works



Examined By :
(Mis

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EASTERN THAI CONSULTING 1992 CO., LTD.

683 Moo 11 Sukhaphibarn 8 Rd., Nongkham, Sriracha, Chonburi 20230
Tel: 0-3848-1197-8, 0-3876-3031-2 Fax: 0-3848-2095 E-mail: marketing@etc1992.com



TESTING
No.0159

Test Report

Request No : W6805073
Report No : 6805-1243

Customer : Amata City Rayong Co.,Ltd.**
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230**
Sampling Source : หัวขุโทร**
Sample Name : บริเวณบ้านวังศาลม่อนได้ฝ่ายกันน้ำในนิคมฯ (W4)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 05/05/2025 - 16/05/2025

Sample No : W 68050236
Sampling Date : 03/05/2025**
Sampling Time : 9:30 AM**
Received Date : 05/05/2025
Reported Date : 21/05/2025

Parameter	Unit	Method	Result	Standard ¹
Total Dissolved Solids #	mg/L	Dried at 180 degree celsius (SM:2540C)	816	-
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	134	-
Turbidity *	NTU	Nephelometric Method (SM:2130B)	139	-

Physical Apperance : 1. Sample: yellow, turbid

2. Container: Normal [PE 0.5 L(3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3

2. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater,
APHA, AWWA, WEF, 24th Edition, 2023./** = These data are non laboratory data.

3. Miss Nunnaphat Bakhuntod is Technical Management. / MDL = Method Detection Limit [MDL of Cyanide = 0.008 mg/L]

4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharek Phakkiang*

5. ๓*** = อุณหภูมิของน้ำจะต้องไม่สูงกว่าอุณหภูมิมาตรฐานชาติ เกิน 3 องศาเซลเซียส

6. Parameter Outside The Scope of The Registration of Department of Industrial Works



Examined By :
(N

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Request No. W6805073

Report No. 6805-1243

TEST REPORT

Customer : Amata City Rayong Co.,Ltd.
Address : 7 Moo.3, Bowin, Sriracha, Chonburi 20230
Sampling Source : ห้วยไทร
Sample Name : บริเวณบ้านวังศาลม่อนใต้ฝายกั้นน้ำในนิคมฯ (W4)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 05/05/2025 - 16/05/2025
Sample No. : W 68050236
Sampling Date : 03/05/2025
Sampling Time : 9:30 AM
Received Date : 05/05/2025
Reported Date : 21/05/2025

Parameter	Unit	Method	Method Detection Limit	Result	Standard ¹⁾
Organochlorine Pesticides					
alpha-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.020	Not Detected	≤ 0.02
beta-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
gamma-BHC (Lindane)	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
delta-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Heptachlor	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.2
Aldrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.1
Heptachlor epoxide (isomer B)	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.2
trans-Chlordane	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Endosulfan I	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
cis-Chlordane	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Dieldrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 0.1
4,4'-DDE	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Endrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.050	Not Detected	****
Endosulfan II	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
4,4'-DDD	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Endrin aldehyde	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Endosulfan sulfate	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
4,4'-DDT	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	≤ 1.0
Endrin ketone	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-
Methoxychlor	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410 B)	0.030	Not Detected	-

Physical Appearance : 1. Sample : yellow, turbid
2. Container : Normal [PE 0.5 L(3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3
2.*** ต้องตรวจไม่พบตามวิธีตรวจสอบที่กำหนด
3. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition. 2023.
4. Parameter Outside The Scope of The Registration of Environmental Works
5. Sampling By Mr. Supharek Phatklang



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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Test Report

Request No : W6805073

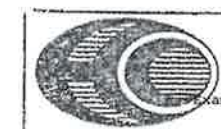
Report No : 6805-1243

Customer : Amata City Rayong Co.,Ltd.
Address : 7 Moo 3, Bowin, Sriracha, Chonburi 20230
Sampling Source : ห้วยไทร
Sample Name : บริเวณบ้านวังศาลม่อนใต้ฝายกั้นน้ำในนิคมฯ (W4)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 05/05/2025 - 16/05/2025
Sample No : W 68050236
Sampling Date : 03/05/2025
Sampling Time : 9:30 AM
Received Date : 05/05/2025
Reported Date : 21/05/2025

Parameter	Unit	Method	Result	Standard ¹⁾
Ammonia Nitrogen #	mg/L	Spectrophotometer	1.02	≤ 0.5

Physical Appearance : 1. Sample : yellow, turbid
2. Container : Normal [PE 0.5 L(3 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 Surface Water Quality Standards Notification of the National Environment Board No. 8 BE. 2537 (1994) , Class 3
2. # Tested by the office of Public Health and Environmental Technology Services Faculty of Public Health Mahidol University
3. Sampling By Mr. Supharek Phatklang




บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด


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ภาคผนวก ข.2-12

เอกสารการตรวจสอบและดูแลท่อน้ำเสีย

	Check sheet form	Work Outline	Enforcement Date : 2021/09/01 :	Page :1/3
			FM-UTI-005	Rev. : 03
Level 3	Waste water treatment system			

WASTE WATER TREATMENT SYSTEM DAILY CHECK POINT ON MONTH June 1985[illegible]

	Check sheet form	Work Outline	Enforcement Date : 2021/09/01	Page :2/3
	Level 3 Waste water treatment system		FM-UTI-005	Rev. : 03

Check point	Standard	Checking method	Shift	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Mixing blower A/B	No noise and vibration, overload (ไม่มีเสียง, สั่น หรือขยับตัว)	By hearing and touch	Day	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
			Night	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Sludge pump	Time working is normal (การทำงานปกติ)	By visual	Day	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	OK	S	S	OK
Effluent pump	No noise and vibration, overload (ไม่มีเสียง, สั่น หรือขยับตัว)	By hearing and touch	Day	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	OK	S	S	OK
Sewage aeration 1	Aeration in basin be proper (ปริมาณอากาศในบ่อไหลปกติ)	By visual	Day	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	OK	S	S	OK
Sewage aeration 2	Aeration in basin be proper (ปริมาณอากาศในบ่อไหลปกติ)	By visual	Day	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	OK	S	S	OK
Cooling tower Fan	No noise and vibration (ไม่มีเสียงหรือสั่นผิดปกติ)	By hearing and touch	Day	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
			Night	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Waste in let valve	All waste inlet valve in open condition (วาล์วรับน้ำเสียเปิดตลอดเวลา)	By visual	Day	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	OK	S	S	OK	OK
Flotation basin	Flotation sludge channel cleaning (ทำความสะอาดตะกอน)	By visual	Day	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	OK	S	S	OK	OK
pH meter	pH meter work in normal condition.	By visual	Day	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	OK	S	S	OK	OK	

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			2021/09/01	
Level 3	Waste water treatment system		FM-UTI-005	Rev. : 03

Check point	Standard	Checking method	Shift	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Drum screen waste disposal (ถังคัดแยกขยะ)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
		Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Cake hopper waste volume checking (ตรวจปริมาณขยะที่ถังขี้เถ้า)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
		Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Waste water pipeline	Discharge pipe is not leak or broken (ท่อส่งของเหลวไม่รั่วซึม)	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
		Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

Working time	Day	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00
	Night	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00
Done by	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Checked by	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

Remark:

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			2021/09/01	
Level 3	Waste water treatment system		FM-UTI-005	Rev. : 03

WASTE WATER TREATMENT SYSTEM DAILY CHECK POINT ON MONTH Feb. 2025

Check point	Standard	Checking method	Shift	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Appearance (สภาพทั่วไป)	No leak and not broken (ไม่รั่ว ไม่แตก)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
H ₂ SO ₄ dosing pump	Normally dosing (การให้ยาปกติ ไม่มีการรั่ว หรือ สิ้นสุดยา)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
NaOH dosing pump	Normally dosing (การให้ยาปกติ ไม่มีการรั่ว หรือ สิ้นสุดยา)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
PAC dosing pump	Normally dosing (การให้ยาปกติ ไม่มีการรั่ว หรือ สิ้นสุดยา)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
A-polymer dosing pump	Normally dosing (การให้ยาปกติ ไม่มีการรั่ว หรือ สิ้นสุดยา)	By hearing and touch ด้วยสัมผัส	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
C-polymer dosing pump	Normally dosing (การให้ยาปกติ ไม่มีการรั่ว หรือ สิ้นสุดยา)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Alkali & Acid w/w pump	No noise and vibration, overheat (ไม่มีเสียง, สั่น หรือ ร้อน)	By hearing and touch ด้วยสัมผัส	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
ADT	Bubbles in floatation are good condition.	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Agilator	No noise and vibration (ไม่มีเสียง หรือ สั่น)	By hearing ด้วยการฟัง	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

	Check sheet form	Work Outline	Enforcement Date : 2021/09/01	Page :2/3
	Level 3		Waste water treatment system	FM-UTI-005

Check point	Standard	Checking method	Shift	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Mixing blower A/B (ไม่มีเสียง, สั่น หรือร้อน)	No noise and vibration, overheat	By hearing and touch ด้วยสัมผัส	Day	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	
			Night	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	
Sludge pump	Time working is normal (การทำงานปกติ)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
Effluent pump	No noise and vibration, overheat (ไม่มีเสียง, สั่น หรือร้อน)	By hearing and touch ด้วยสัมผัส	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
Sewage aeration 1	Aeration in basin be proper (ปริมาณอากาศในบ่อให้อยู่ปกติ)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
Sewage aeration 2	Aeration in basin be proper (ปริมาณอากาศในบ่อให้อยู่ปกติ)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
Cooling tower Fan	No noise and vibration (ไม่มีเสียงหรือสั่นผิดปกติ)	By hearing and touch ด้วยสัมผัส	Day	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	
			Night	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	
Waste in let valve	All waste inlet valve in open condition (วาล์วรับน้ำเสียอยู่สถานะเปิด)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
Floatation basin	Floatation sludge channel cleaning (ทำความสะอาดตะกอนลอย)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
pH meter	pH meter work in normal condition.	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	

	Check sheet form	Work Outline	Enforcement Date : 2021/09/01	Page :3/3
	Level 3		Waste water treatment system	FM-UTI-005


Check point	Standard	Checking method	Shift	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Drum screen	Drum screen waste disposal (กำจัดกากตะกอน)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
Cake hopper	Cake hopper waste volume checking (ตรวจปริมาณกากที่จะกำจัด)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
Waste water pipeline	Discharge pipe is not leak or broken (ท่อส่งน้ำเสียไม่รั่วหรือขาด)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	

NOTE:

เขียน : OK = Normal Condition (แทนสภาพปกติ)
 NG = Abnormal Condition (แทนสภาพผิดปกติ)
 S = Stop Condition (แทนการหยุดการทำงาน)

Working line	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
	Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
Done by	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
	Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
Checked by	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
	Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	


Remark: 11/9/2025 - ทดสอบ MT รีเลย์ Mechanical Seal Pump Acid conc. Test Run OK.
 13-14/9/2025 - ทดสอบ MT รีเลย์ Mechanical Seal Pump Acid conc. Test Run OK.
 21/2/2025 - ทดสอบ MT รีเลย์ Mechanical Seal Pump Acid conc. Test Run OK.
 25-27/2/25 - MT Repair Bleed Dosing pump "B" Leak/ Test Leak "OK"

	Check sheet form	Work Outline	Enforcement Date :	Page :1/3
			2021/09/01	Rev. : 03
Level 3	Waste water treatment system		FM-UTI-005	

WASTE WATER TREATMENT SYSTEM DAILY CHECK POINT ON MONTH Mar 2025

Check point	Standard	Checking method	Shift	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Appearance (สภาพทั่วไป)	No leak and not broken (ไม่มีรั่ว ไม่แตกหัก)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
H ₂ SO ₄ dosing pump	Normally dosing (การให้ปกติ ไม่มีการรั่ว หรือ สิ้นสุดเสียง)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
NaOH dosing pump	Normally dosing (การให้ปกติ ไม่มีการรั่ว หรือ สิ้นสุดเสียง)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
PAC dosing pump	Normally dosing (การให้ปกติ ไม่มีการรั่ว หรือ สิ้นสุดเสียง)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
A-polymer dosing pump	Normally dosing (การให้ปกติ ไม่มีการรั่ว หรือ สิ้นสุดเสียง)	By hearing and touch ด้วยสัมผัส	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
C-polymer dosing pump	Normally dosing (การให้ปกติ ไม่มีการรั่ว หรือ สิ้นสุดเสียง)	By visual ด้วยสายตา	Day	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
			Night	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Alkali & Acid w/w pump	No noise and vibration, overheat (ไม่มีเสียง, สั่น หรือร้อน)	By hearing and touch ด้วยสัมผัส	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
ADT	Bubbles in floatation are good condition.	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Agitator	No noise and vibration (ไม่มีเสียง หรือสั่น)	By hearing ด้วยสัมผัส	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

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	Check sheet form	Work Outline	Enforcement Date :	Page :2/3
			2021/09/01	Rev. : 03
Level 3	Waste water treatment system		FM-UTI-005	

Check point	Standard	Checking method	Shift	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Mixing blower A/B	No noise and vibration, overheat (ไม่มีเสียง, สั่น หรือร้อน)	By hearing and touch ด้วยสัมผัส	Day	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
			Night	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Sludge pump	Time working is normal (การทำงานปกติ)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Effluent pump	No noise and vibration, overheat (ไม่มีเสียง, สั่น หรือร้อน)	By hearing and touch ด้วยสัมผัส	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Sewage aeration 1	Aeration in basin be proper (ปริมาณอากาศในบ่อให้ปกติ)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Sewage aeration 2	Aeration in basin be proper (ปริมาณอากาศในบ่อให้ปกติ)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Cooling tower Fan	No noise and vibration (ไม่มีเสียงหรือสั่นผิดปกติ)	By hearing and touch ด้วยสัมผัส	Day	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
			Night	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Waste in let valve	All waste Inlet valve in open condition (วาล์วรับน้ำเสียอยู่สถานะเปิด)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Floatation basin	Floatation sludge channel cleaning (ทำความสะอาดตะกอน)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
pH meter	pH meter work in normal condition.	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

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posco TCS	Check sheet form	Work Outline	Enforcement Date :	Page :3/3
			2021/09/01	
Level 3	Waste water treatment system		FM-UTI-005	Rev. : 03

Check point	Standard	Checking method	Shift	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Drum screen	Drum screen waste disposal (การกำจัดกากตะกอน)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Cake hopper	Cake hopper waste volume checking (การวัดปริมาณกากตะกอน)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Waste water pipeline	Discharge pipe is not leak or broken (ท่อปล่อยน้ำไม่รั่ว)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

NOTE:

เขียน : OK = Normal Condition
(แผนภาพปกติ)
NG = Abnormal Condition
(แผนภาพผิดปกติ)
S = Stop Condition
(แผนการหยุดการทำงาน)

Working time	Day	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00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Remark: 6/3/9095 - Cleaning and Check Sump pump Cake Hopper Room 13:00 - 14:00

9/3/25 - H2SO4 Dosing Pump "A" 10% Increase 14/3/25 - A-p
18/3/25 - MT Repair A-Polymer pump "A" and Change Diafom.
19/3/25 - MT Repair H2SO4 Dosing Pump "A" Check Valve Crack
Pump "B" Change new Part Check Valve.

posco TCS	Check sheet form	Work Outline	Enforcement Date :	Page :1/3
			2021/09/01	
Level 3	Waste water treatment system		FM-UTI-005	Rev. : 03

WASTE WATER TREATMENT SYSTEM DAILY CHECK POINT ON MONTH Apr 2025

Check point	Standard	Checking method	Shift	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Appearance (สภาพทั่วไป)	No leak and not broken (ไม่รั่ว ไม่แตก)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
H ₂ SO ₄ dosing pump	Normally dosing (การใส่กรด ไม่มีการรั่ว หรือ สิ้นสุดเตือน)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
NaOH dosing pump	Normally dosing (การใส่ด่าง ไม่มีการรั่ว หรือ สิ้นสุดเตือน)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
PAC dosing pump	Normally dosing (การใส่สารตกตะกอน ไม่มีการรั่ว หรือ สิ้นสุดเตือน)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
A-polymer dosing pump	Normally dosing (การใส่โพลีเมอร์ ไม่มีการรั่ว หรือ สิ้นสุดเตือน)	By hearing and touch ด้วยสัมผัส	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
C-polymer dosing pump	Normally dosing (การใส่โพลีเมอร์ ไม่มีการรั่ว หรือ สิ้นสุดเตือน)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Alkali & Acid w/w pump	No noise and vibration, overheat (ไม่มีเสียง, สั่น, หรือร้อน)	By hearing and touch ด้วยสัมผัส	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
ADT	Bubbles in floatation are good condition.	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Agitator	No noise and vibration (ไม่มีเสียง หรือสั่น)	By hearing ด้วยสัมผัส	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

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	Check sheet form	Work Outline	Enforcement Date : 2021/09/01	Page :2/3
	Level 3		Waste water treatment system	FM-UTI-005

Check point	Standard	Checking method	Shift	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Mixing blower A/B	No noise and vibration, overheat (ไม่มีเสียง, สั่น หรือร้อน)	By hearing and touch ด้วยสัมผัส	Day	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	
			Night	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	
Sludge pump	Time working is normal (การทำงานปกติ)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	S	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	S	S	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Effluent pump	No noise and vibration, overheat (ไม่มีเสียง, สั่น หรือร้อน)	By hearing and touch ด้วยสัมผัส	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	S	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	S	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Sewage aeration 1	Aeration in basin be proper (ปริมาณอากาศในบ่อไฮดรอลิก)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	S	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	S	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Sewage aeration 2	Aeration in basin be proper (ปริมาณอากาศในบ่อไฮดรอลิก)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	S	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	S	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Cooling tower Fan	No noise and vibration (ไม่มีเสียงหรือสั่นผิดปกติ)	By hearing and touch ด้วยสัมผัส	Day	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	
			Night	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Waste in let valve	All waste inlet valve in open condition (วาล์วรับน้ำเสียอยู่สถานะเปิด)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	S	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	S	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Floatation basin	Floatation sludge channel cleaning (ทำความสะอาดตะกอนลอย)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	S	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	S	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
pH meter	pH meter work in normal condition.	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	S	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	S	S	S	S	S	S	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

	Check sheet form	Work Outline	Enforcement Date : 2021/09/01	Page :3/3
	Level 3		Waste water treatment system	FM-UTI-005

Check point	Standard	Checking method	Shift	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Drum screen	Drum screen waste disposal (กำจัดกากตะกอน)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Cake hopper	Cake hopper waste volume checking (ตรวจปริมาณกากที่จะกำจัด)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Waste water pipeline	Discharge pipe is not leak or broken (ท่อส่งออกน้ำเสียไม่ชำรุด)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

NOTE: เขียน : OK = Normal Condition (แผนภาพปกติ) NG = Abnormal Condition (แผนภาพผิดปกติ) S = Stop Condition (แผนภาพหยุดการทำงาน)	Working time	Day	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00
		Night	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00
	Done by	Day	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa
		Night	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa
Checked by	Day	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa
	Night	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa	Pramoctsa

Remark: 06/04/2025 - Effluent Pump #6 tapping pump broken. Run on Manual Coupling for 1 hour for the Capital.

posco TCS	Check sheet form	Work Outline	Enforcement Date : 2021/09/01	Page :3/3
	Level 3 Waste water treatment system		FM-UTI-005	Rev. : 03

Check point	Standard	Checking method	Shift	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Drum screen	Drum screen waste disposal (กำจัดกากตะกอน)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Coke hopper	Coke hopper waste volume checking (ตรวจปริมาณกากที่โรงคัด)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Waste water pipeline	Discharge pipe is not leak or broken (ท่อส่งออกมาไม่รั่วซึม)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

NOTE:
 OK = Normal Condition
 (แทนสภาพปกติ)
 NG = Abnormal Condition
 (แทนสภาพผิดปกติ)
 S = Stop Condition
 (แทนการหยุดการทำงาน)

Working time	Day	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00
	Night	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00	01:00
Done by	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Checked by	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

Remark: - 29/05/2023 Change Sensor PH meter AP-02-02

posco TCS	Check sheet form	Work Outline	Enforcement Date : 2021/09/01	Page :1/3
	Level 3		Waste water treatment system	FM-UTI-005

WASTE WATER TREATMENT SYSTEM DAILY CHECK POINT ON MONTH Jun 2025

Check point	Standard	Checking method	Shift	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Appearance (สภาพทั่วไป)	No leak and not broken (ไม่รั่ว ไม่แตก)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
H ₂ SO ₄ dosing pump	Normally dosing (การให้กรด ไม่มีการรั่ว หรือ สิ้นสุดเตือน)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
NaOH dosing pump	Normally dosing (การให้ด่าง ไม่มีการรั่ว หรือ สิ้นสุดเตือน)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
PAC dosing pump	Normally dosing (การให้โพลีเมอร์ ไม่มีการรั่ว หรือ สิ้นสุดเตือน)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
A-polymer dosing pump	Normally dosing (การให้โพลีเมอร์ ไม่มีการรั่ว หรือ สิ้นสุดเตือน)	By hearing and touch ด้วยสัมผัส	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
C-polymer dosing pump	Normally dosing (การให้โพลีเมอร์ ไม่มีการรั่ว หรือ สิ้นสุดเตือน)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Alkali & Acid w/w pump	No noise and vibration, overheat (ไม่มีเสียง, สั่น หรือ ร้อน)	By hearing and touch ด้วยสัมผัส	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
ADT	Bubbles in Floation are good condition.	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Agitator	No noise and vibration (ไม่มีเสียง หรือ สั่น)	By hearing ด้วยการฟัง	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

	Check sheet form	Work Outline	Enforcement Date : 2021/09/01	Page :2/3
	Level 3		Waste water treatment system	FM-UTI-005

Check point	Standard	Checking method	Shift	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Mixing blower A/B	No noise and vibration, overheat (ไม่มีเสียงดัง, ควัน หรือร้อน)	By hearing and touch ด้วยสัมผัส	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Sludge pump	Time working is normal (การทำงานปกติ)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Effluent pump	No noise and vibration, overheat (ไม่มีเสียงดัง, ควัน หรือร้อน)	By hearing and touch ด้วยสัมผัส	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Sewage aeration 1	Aeration in basin be proper (ปริมาณอากาศในบ่อให้ออกปกติ)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Sewage aeration 2	Aeration in basin be proper (ปริมาณอากาศในบ่อให้ออกปกติ)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Cooling tower Fan	No noise and vibration (ไม่มีเสียงหรือสั่นผิดปกติ)	By hearing and touch ด้วยสัมผัส	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Waste in let valve	All waste inlet valve in open condition (วาล์วรับน้ำเสียเปิดตลอดเวลา)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Flotation basin	Flotation sludge channel cleaning (ทำความสะอาดตะกอนลอย)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
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pH meter	pH meter work in normal condition.	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

	Check sheet form	Work Outline	Enforcement Date : 2021/09/01	Page :3/3
	Level 3		Waste water treatment system	FM-UTI-005

Check point	Standard	Checking method	Shift	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Drum screen	Drum screen waste disposal (กำจัดกากตะกอน)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Cake hopper	Cake hopper waste volume checking (ตรวจปริมาณกากที่จะกำจัด)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Waste water pipeline	Discharge pipe is not leak or broken (ไม่ส่งของน้ำเสียไม่รั่วซึม)	By visual ด้วยสายตา	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
			Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

NOTE:

เขียน : OK = Normal Condition (แผนสภาพปกติ)
 NG = Abnormal Condition (แผนสภาพผิดปกติ)
 S = Stop Condition (แผนการหยุดการทำงาน)

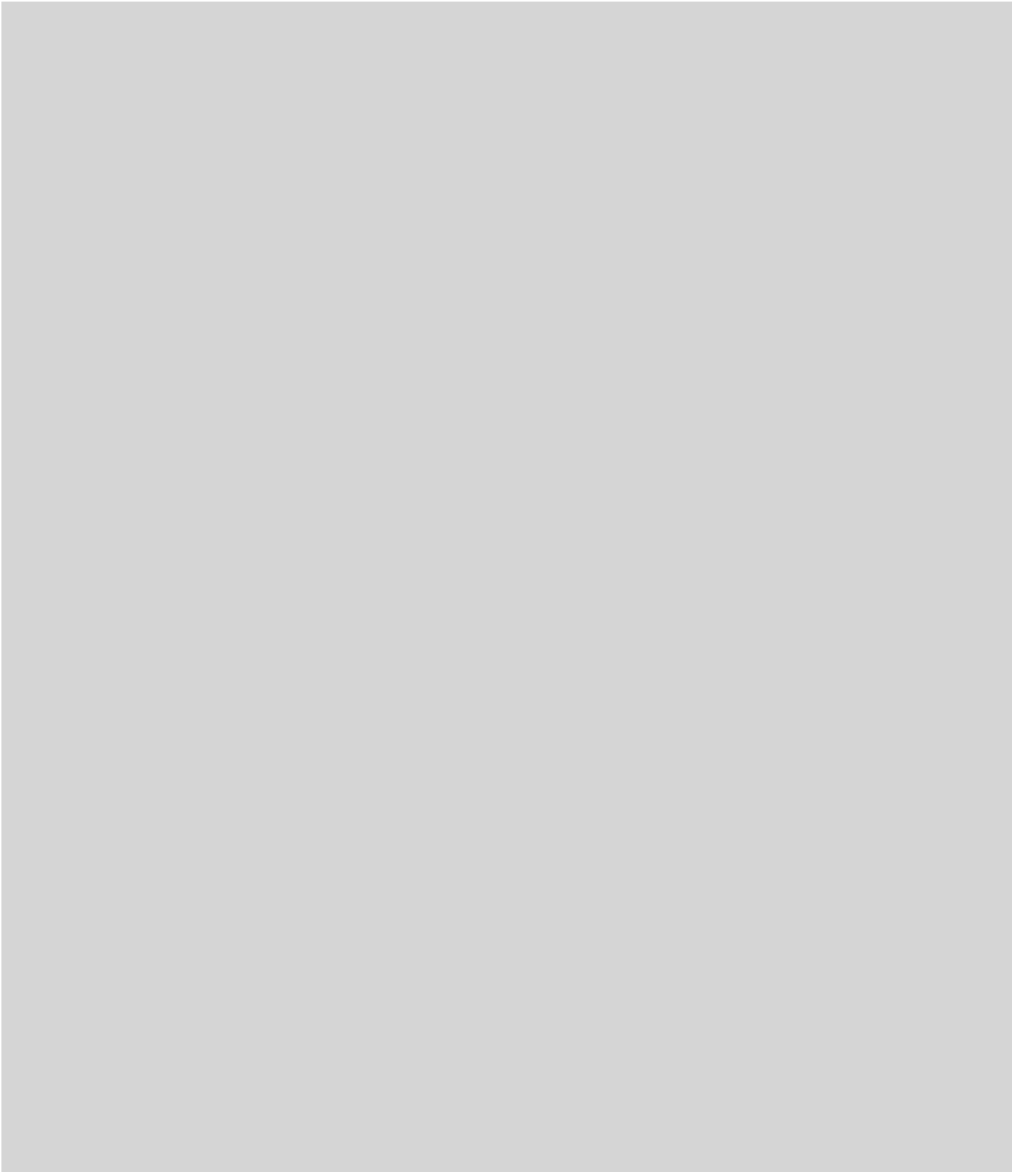
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	Night	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00
Done by	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
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Checked by	Day	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	Night	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

Remark: 23/06/2025 - 100 effluent 50% in 100% WWT Rem in 100% / 100% in 100% 23/06/2025

ภาคผนวก ข.2-13

**เอกสารเกี่ยวกับการจัดการ
ด้านการคมนาคมและขนส่งภายในโรงงาน**

posco TCS	Work Instruction	Work Outline	Enforcement Date : 2024/08/01	Page:1/60
	Level 1		WI-LOG-001	Rev. : 05



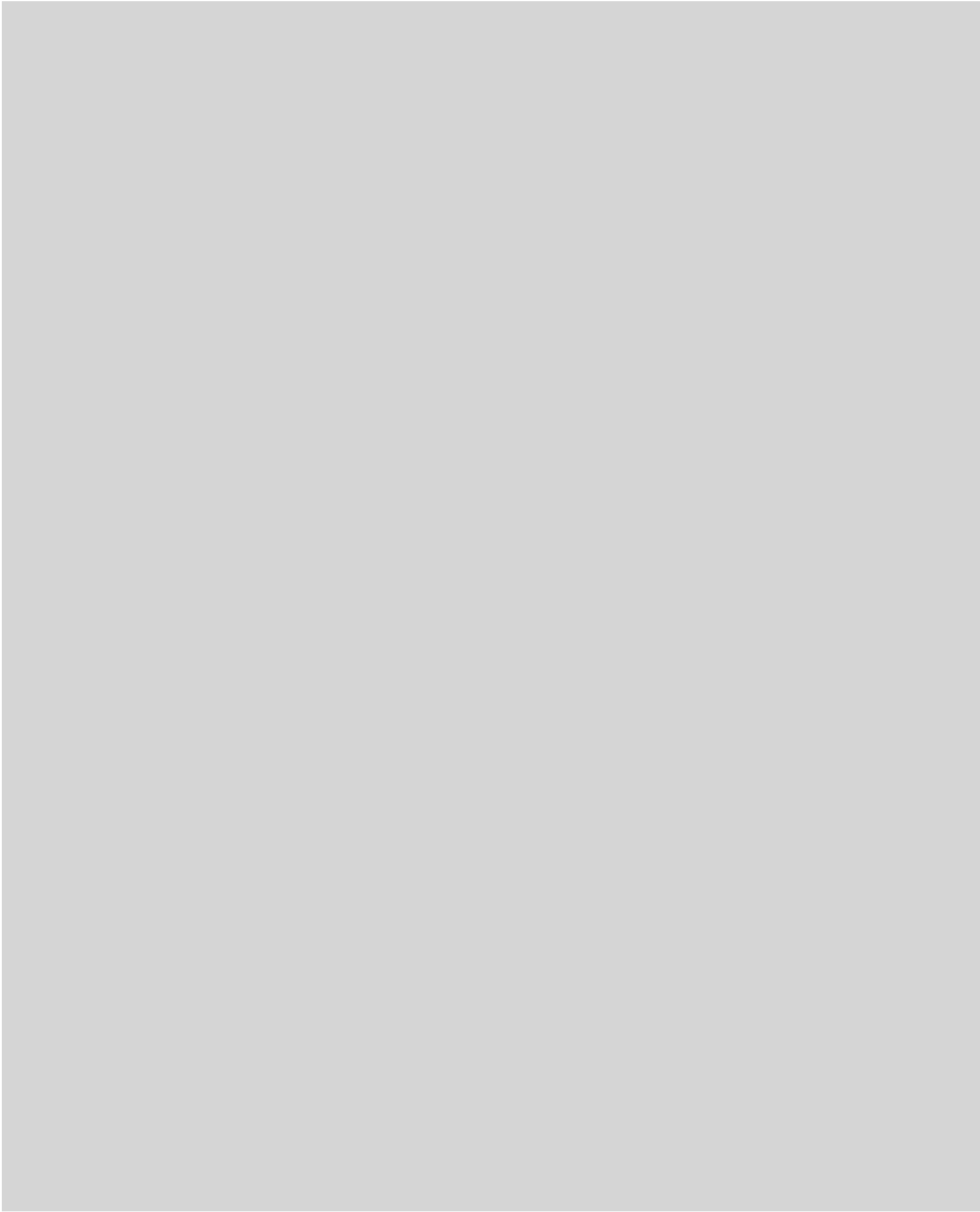
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	Level 1		WI-LOG-001	Rev. : 05



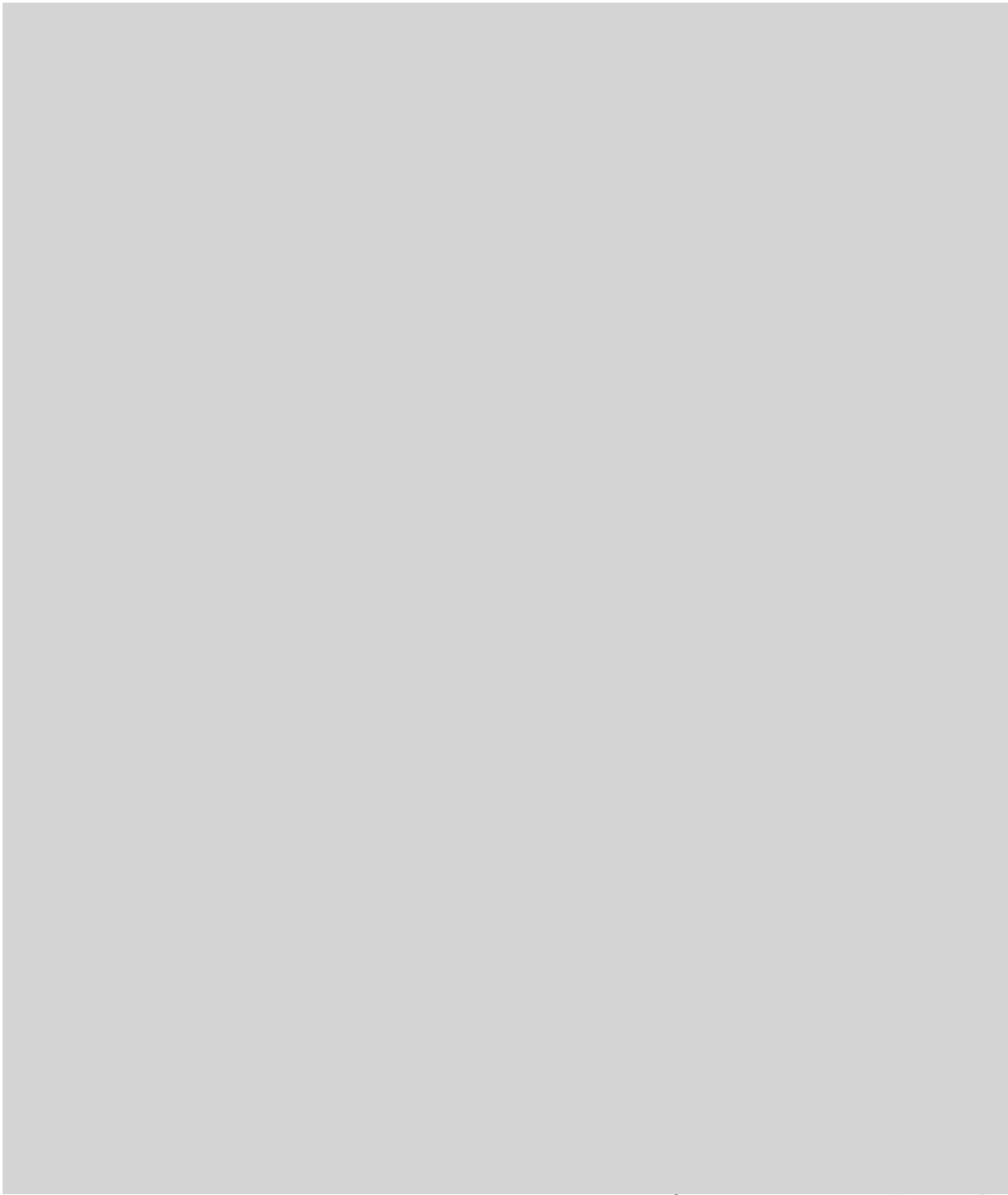
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	Level 1		WI-LOG-001	Rev. : 05



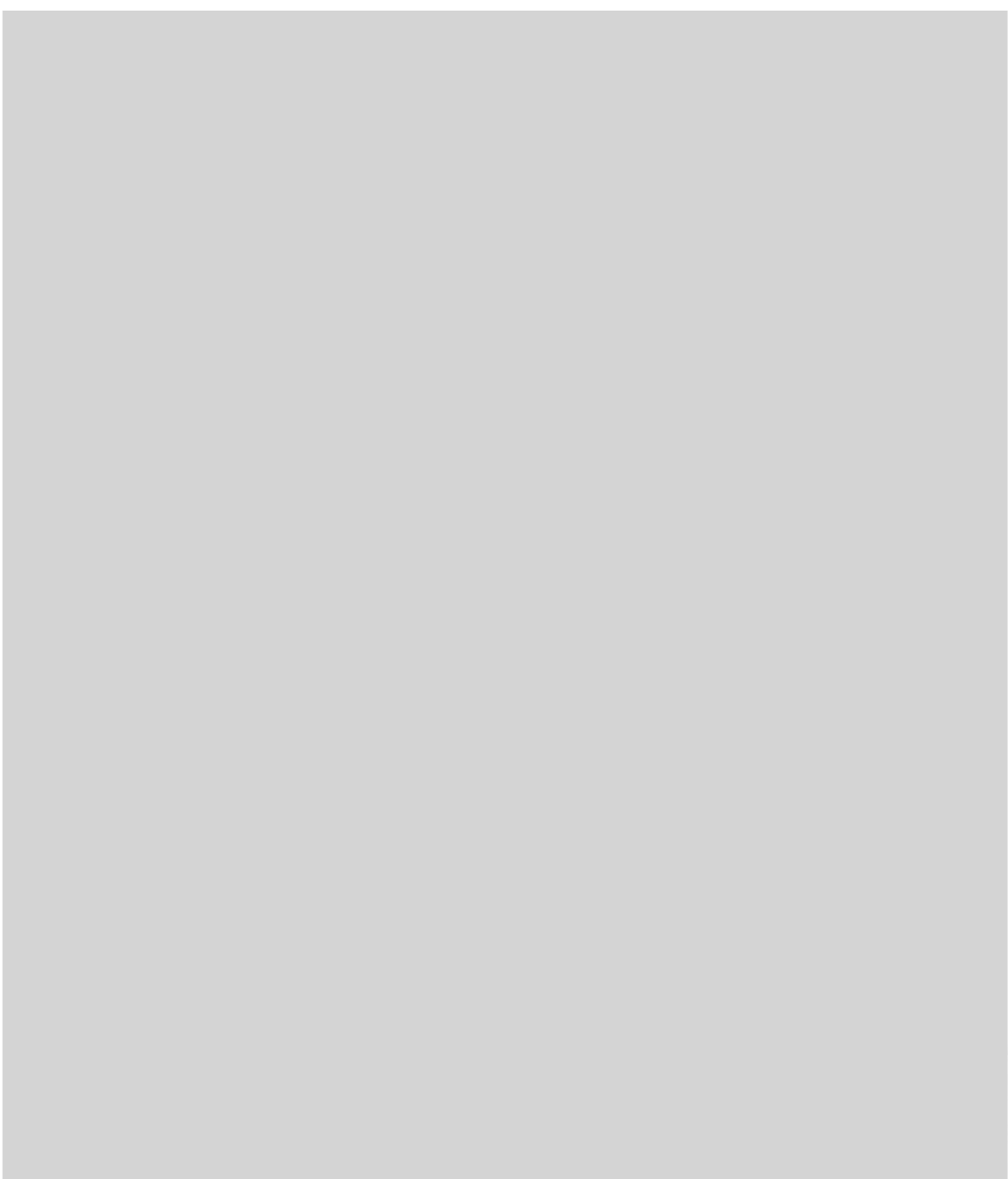
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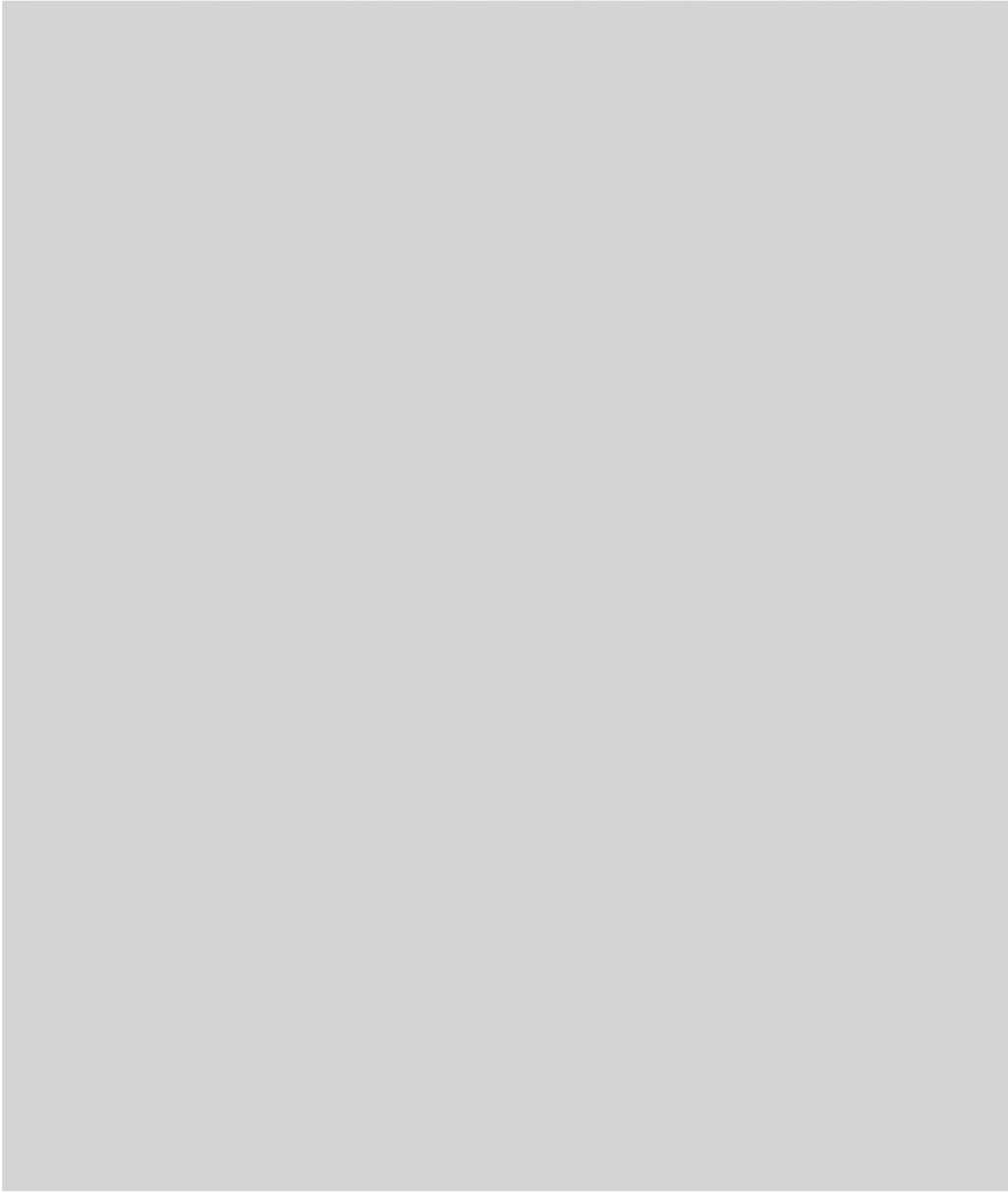
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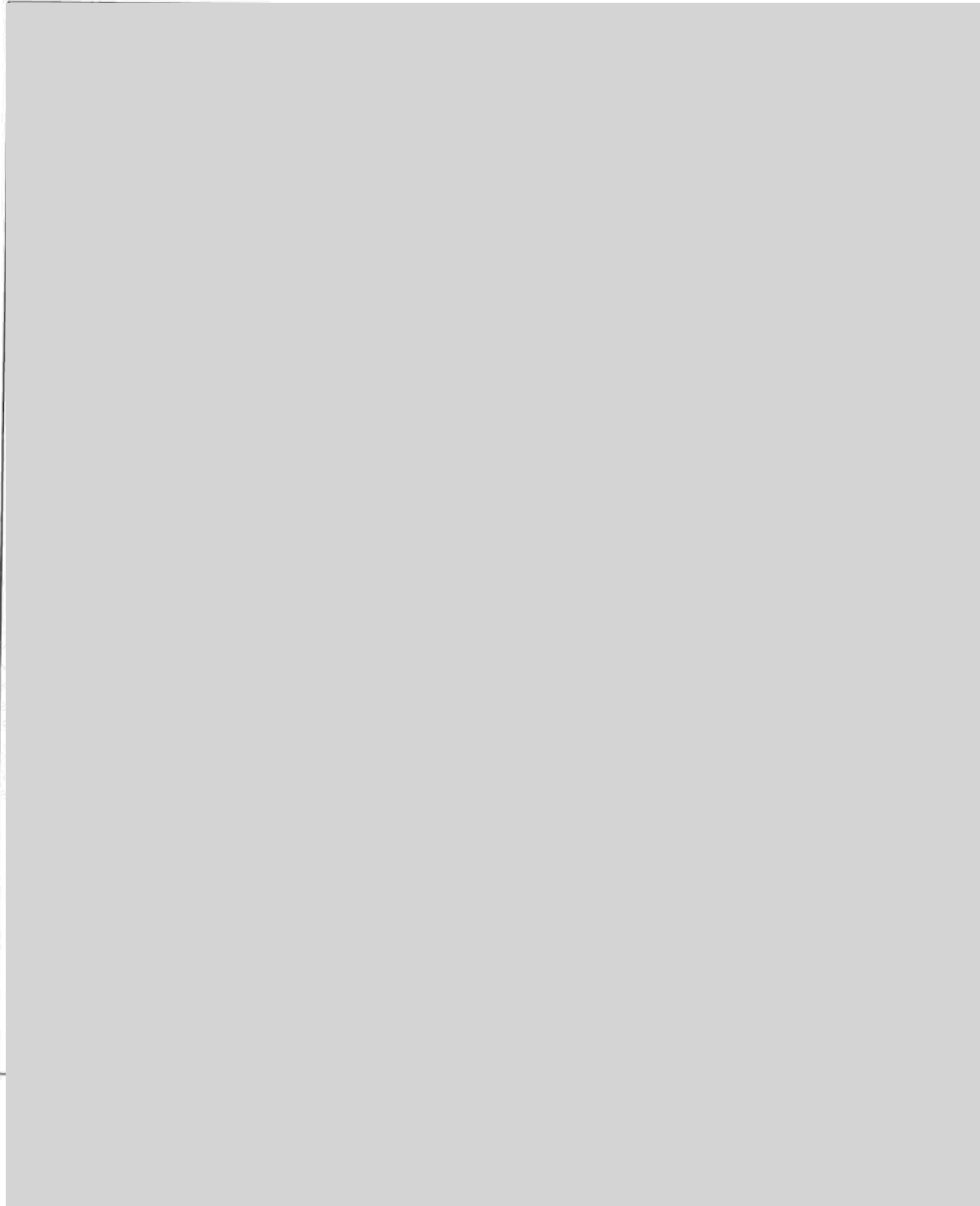
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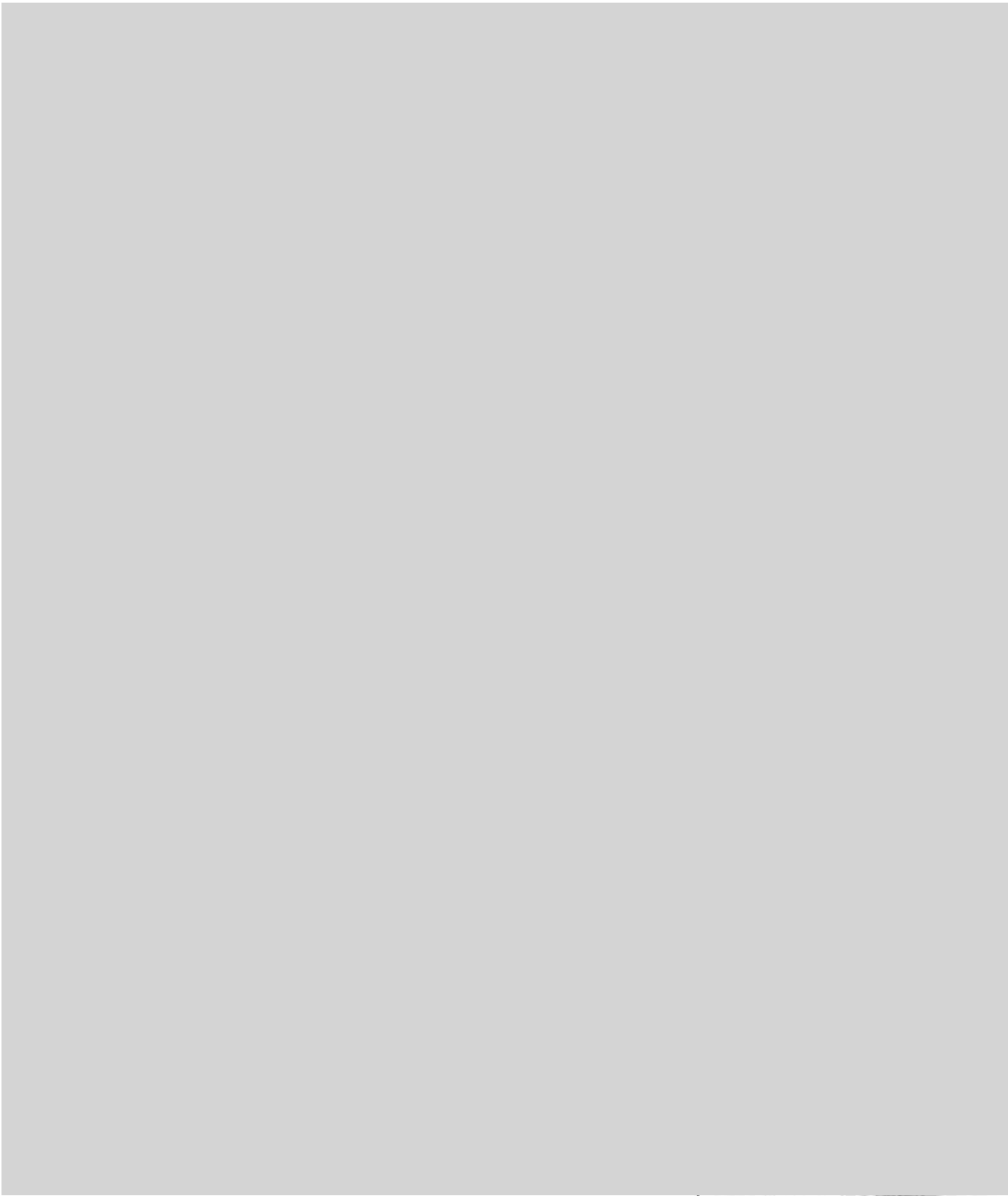
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Level 1	Logistics Delivery		WI-LOG-001	Rev. : 05



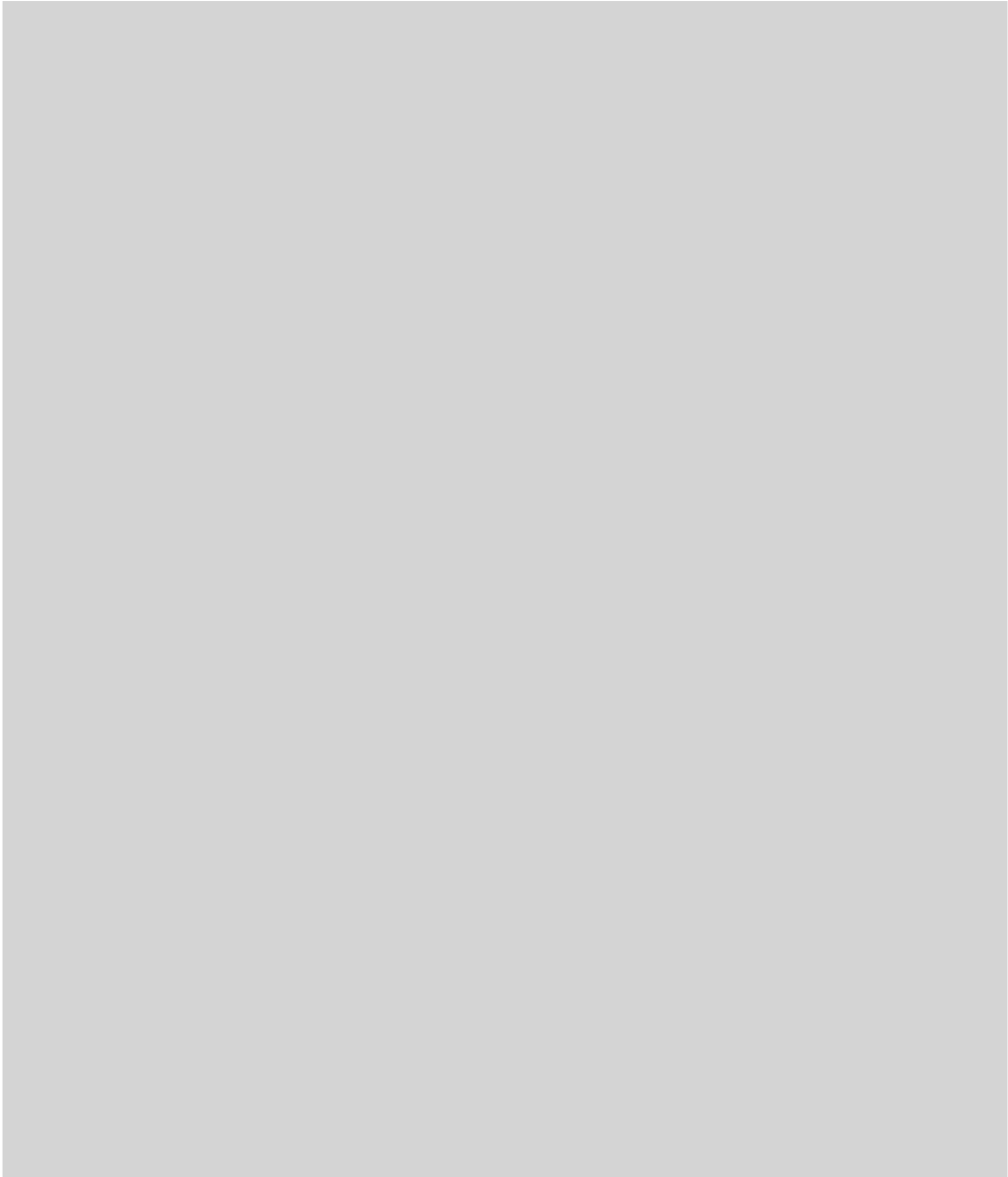
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Level 1	Logistics Delivery		WI-LOG-001	Rev. : 05



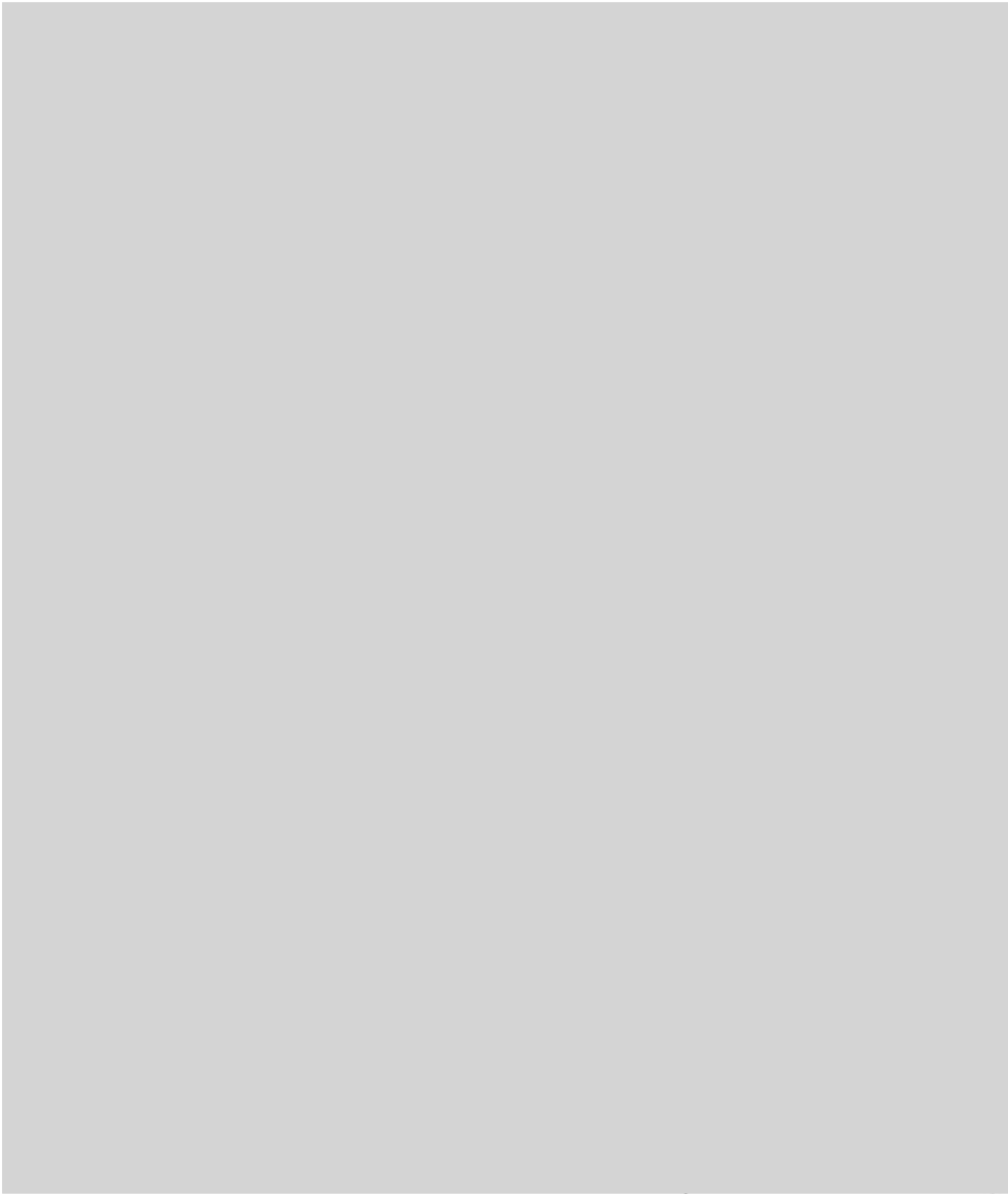
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	Level 1		WI-LOG-001	Rev. : 05



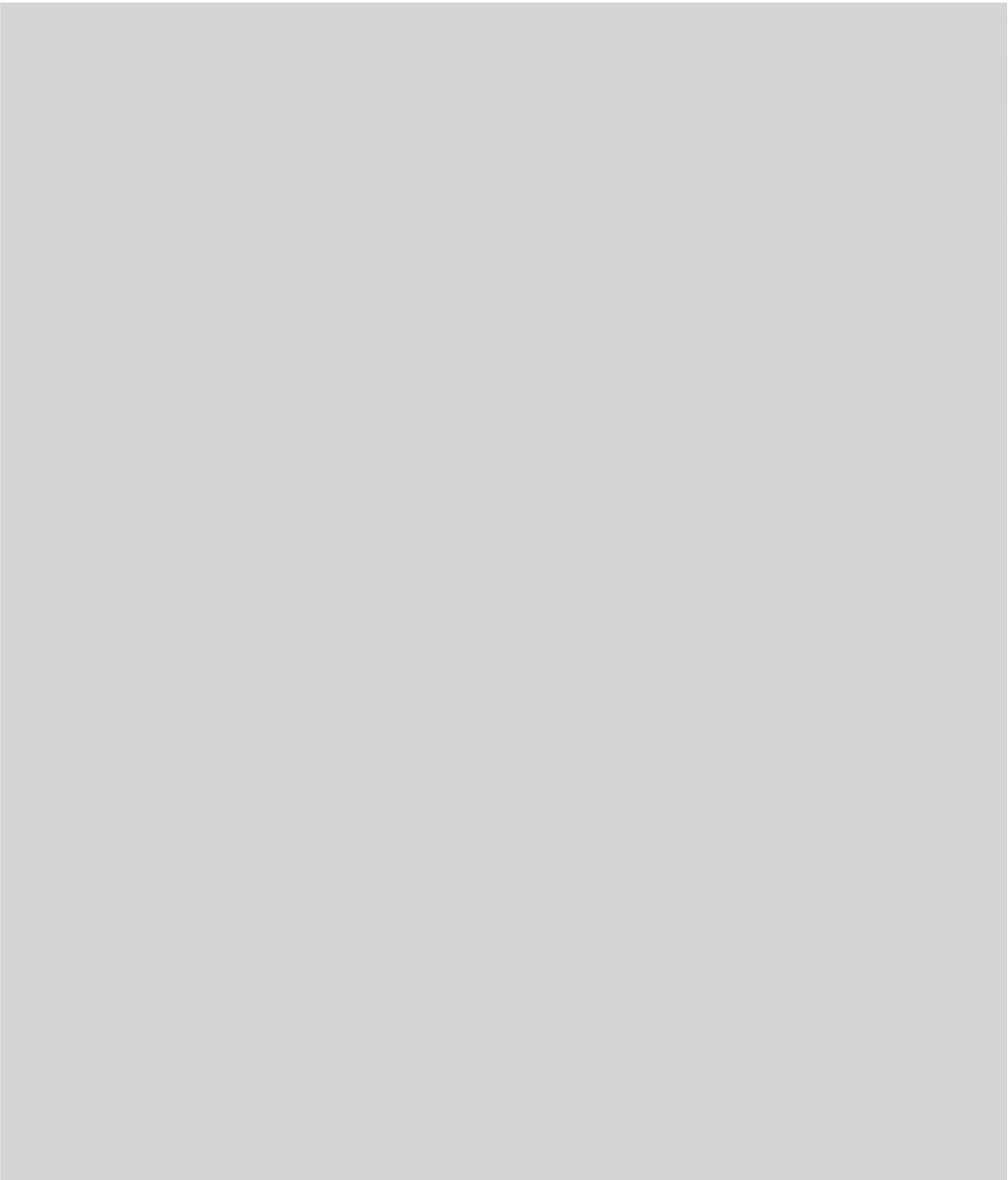
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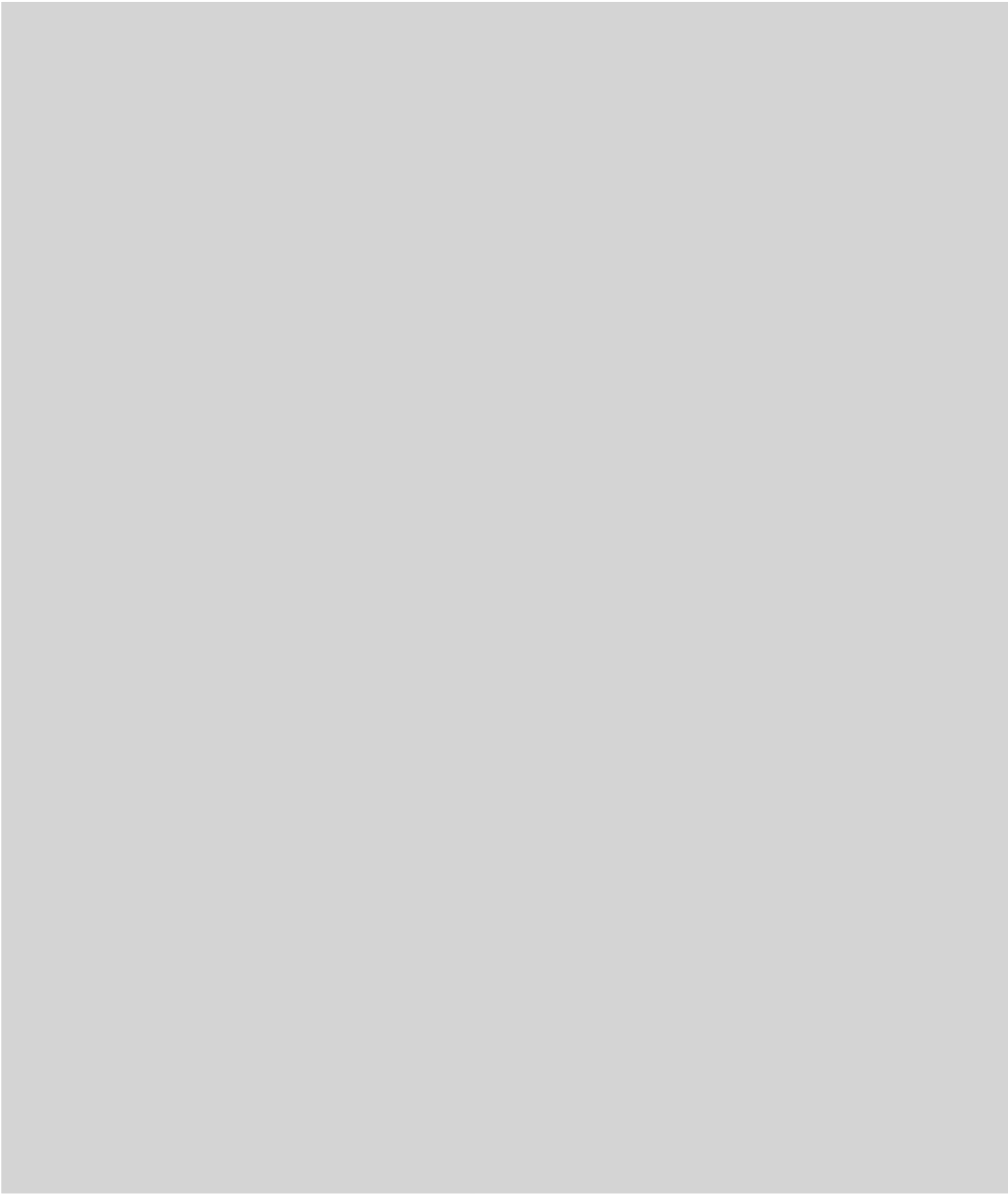
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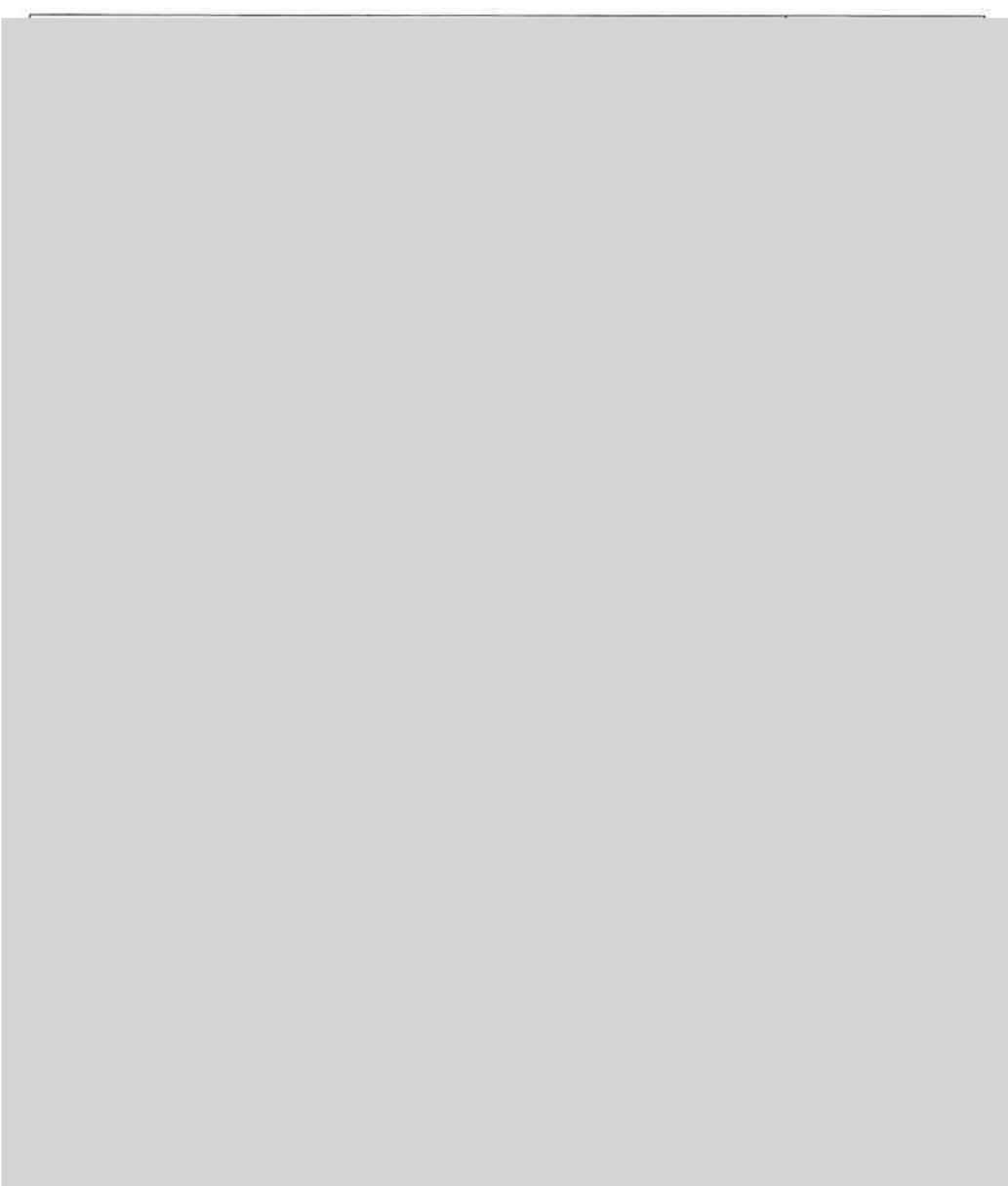
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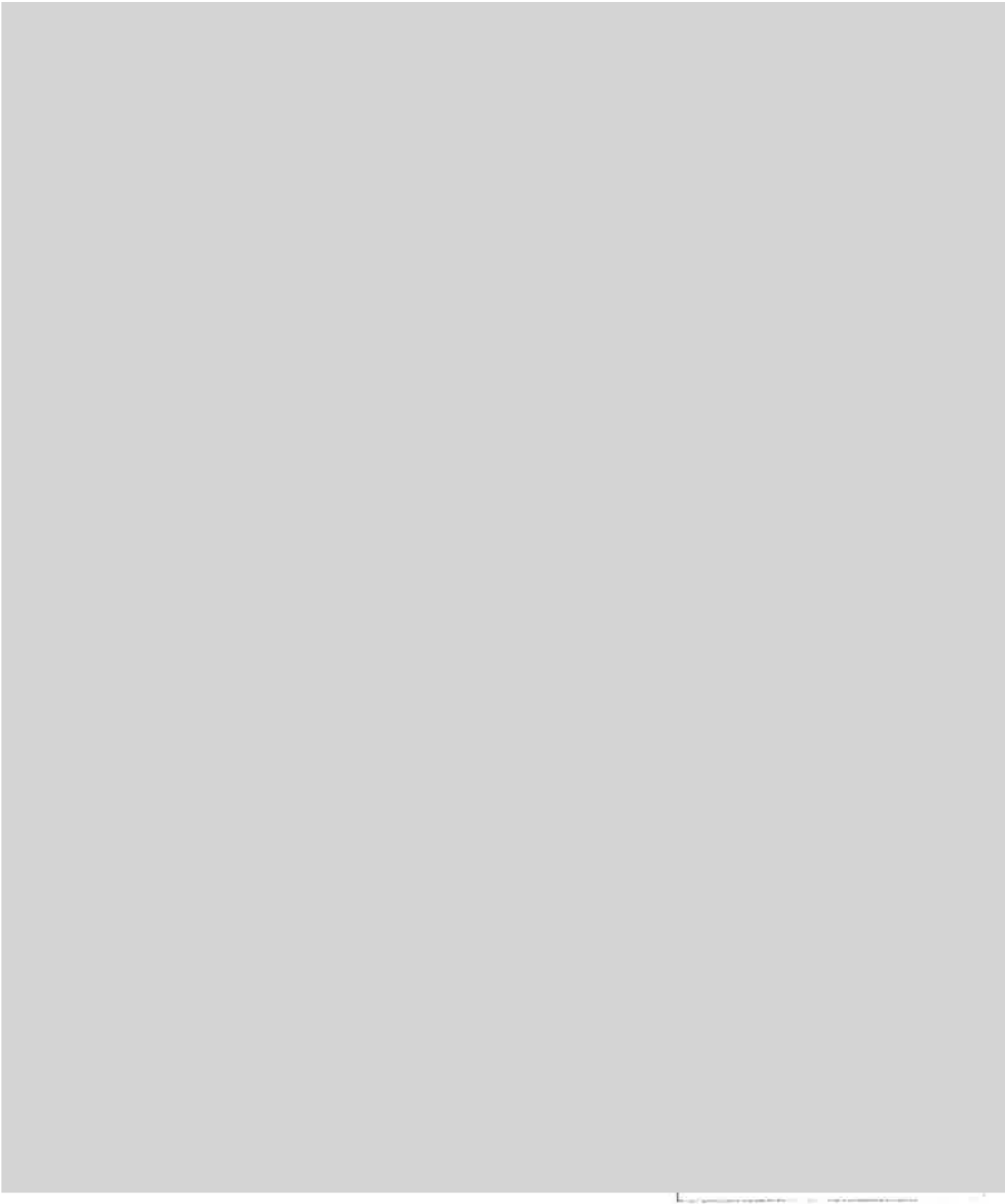
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	Logistics Delivery	Outline	WI-LOG-001	Rev. : 05



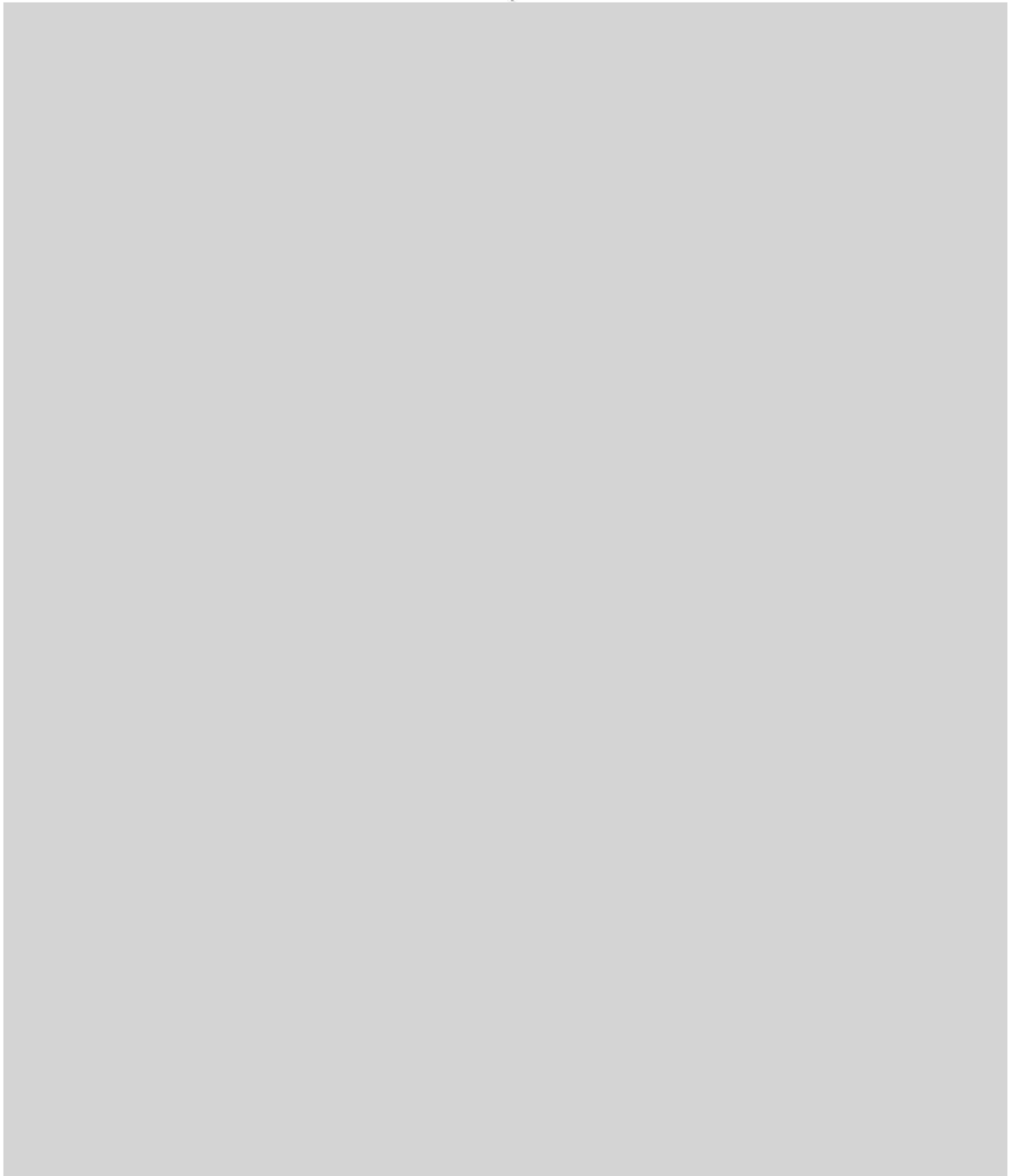
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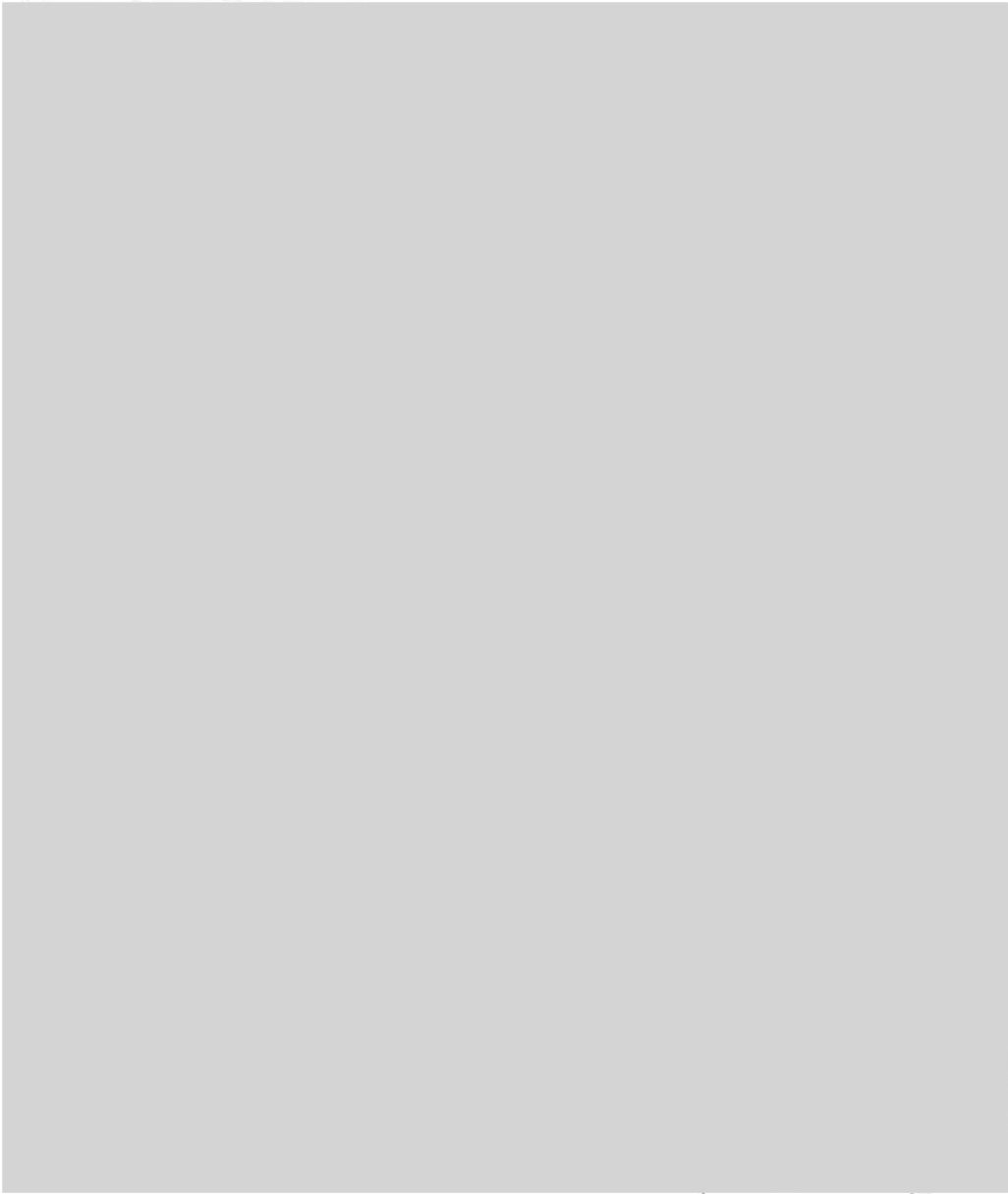
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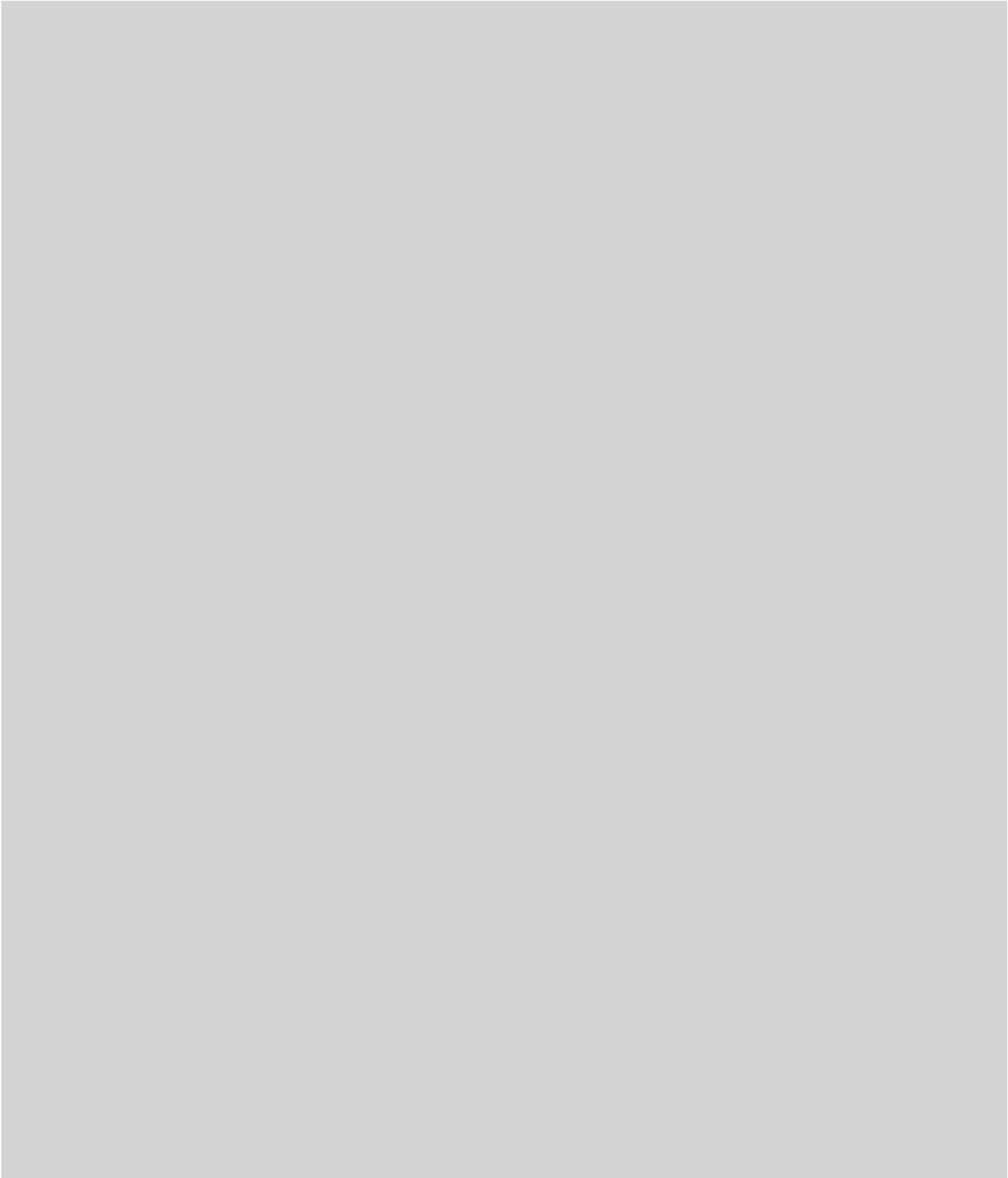
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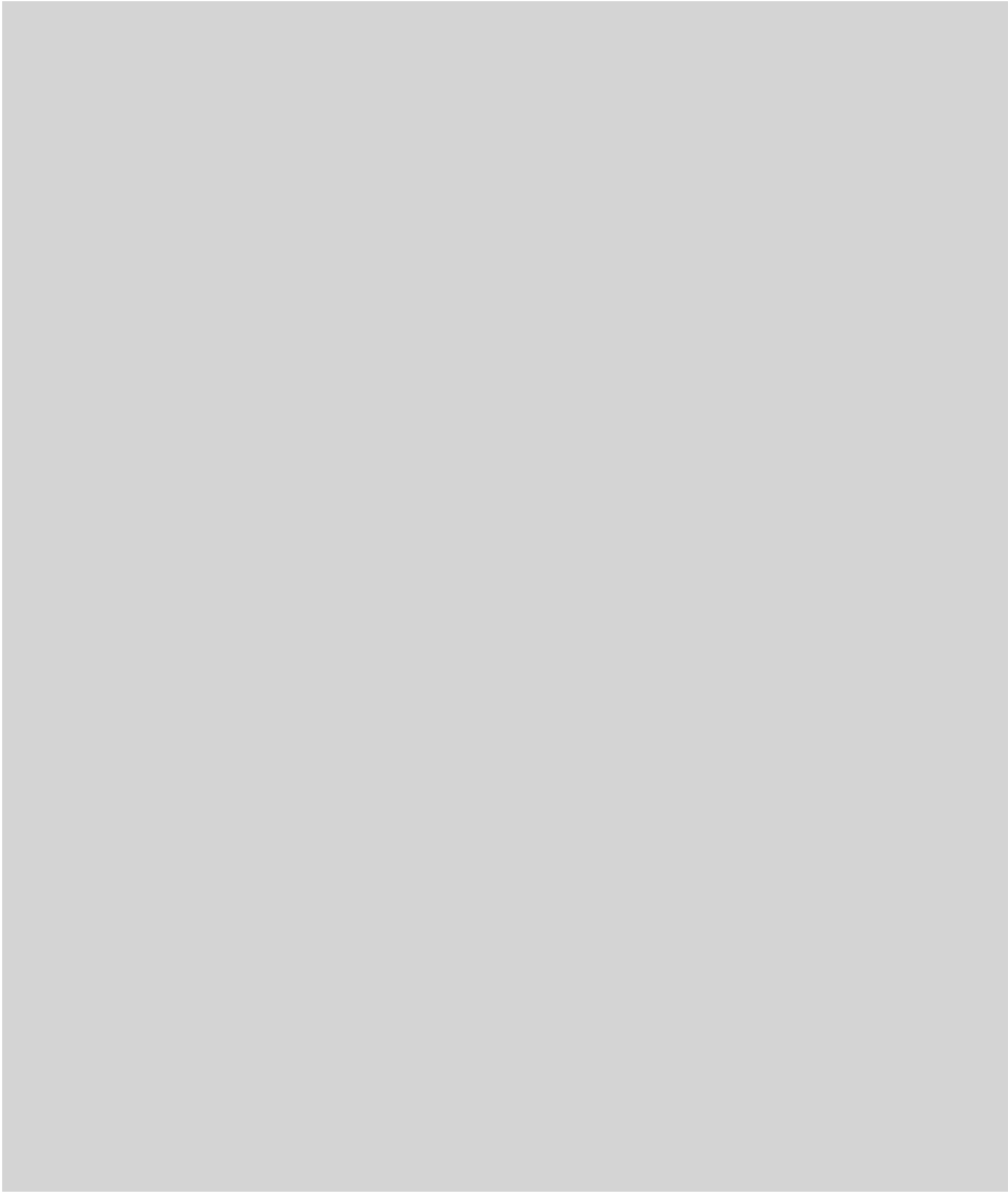
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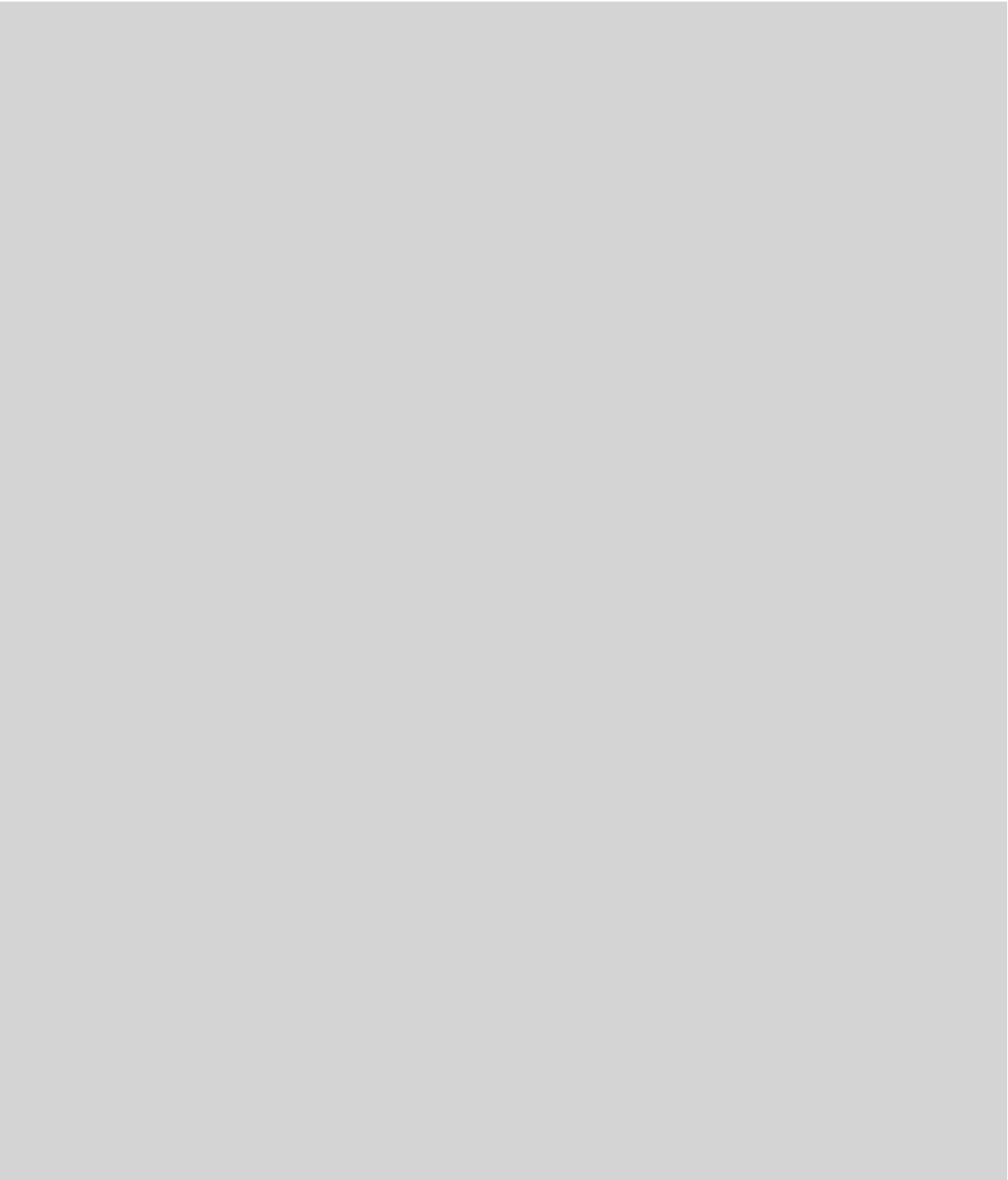
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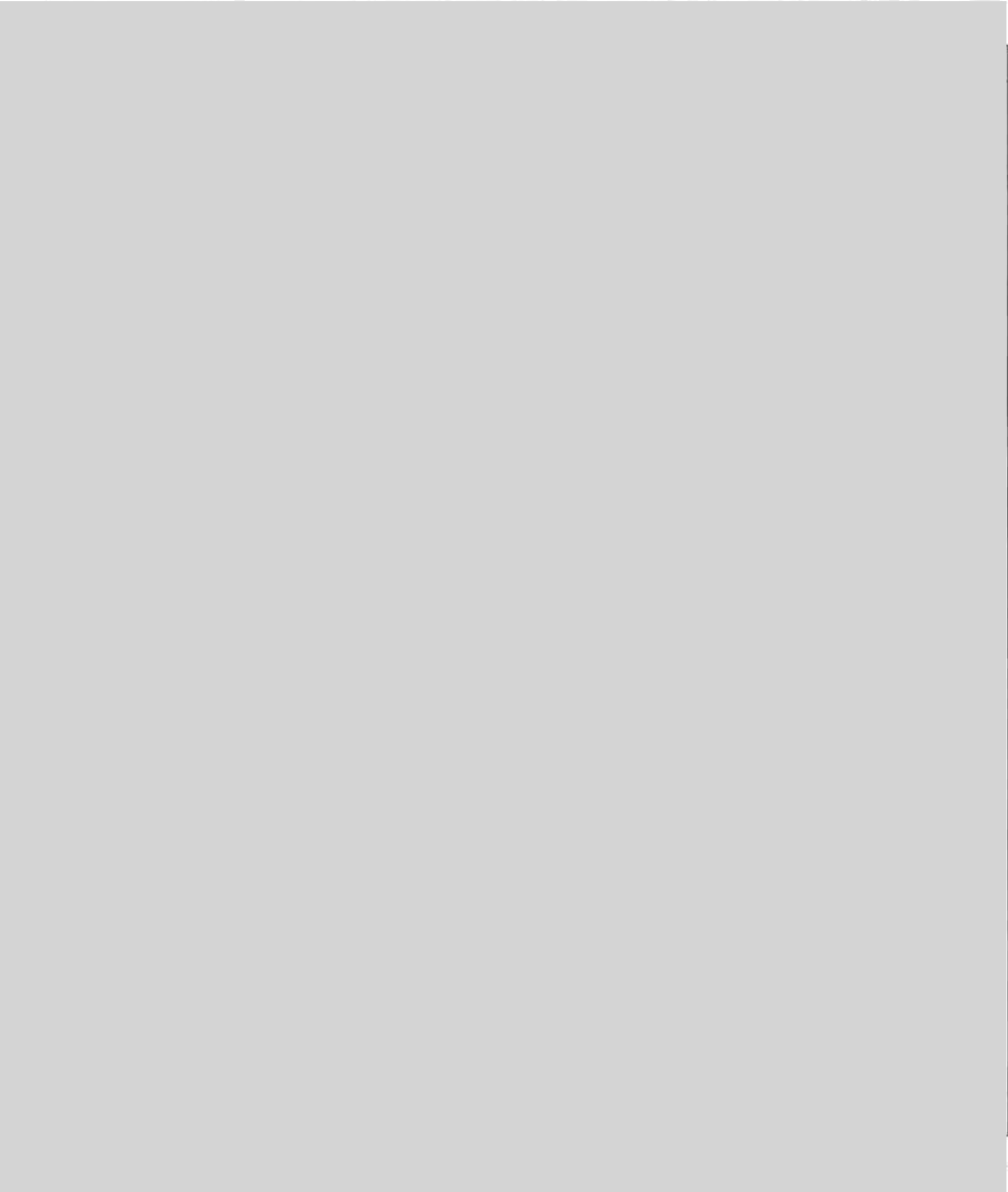
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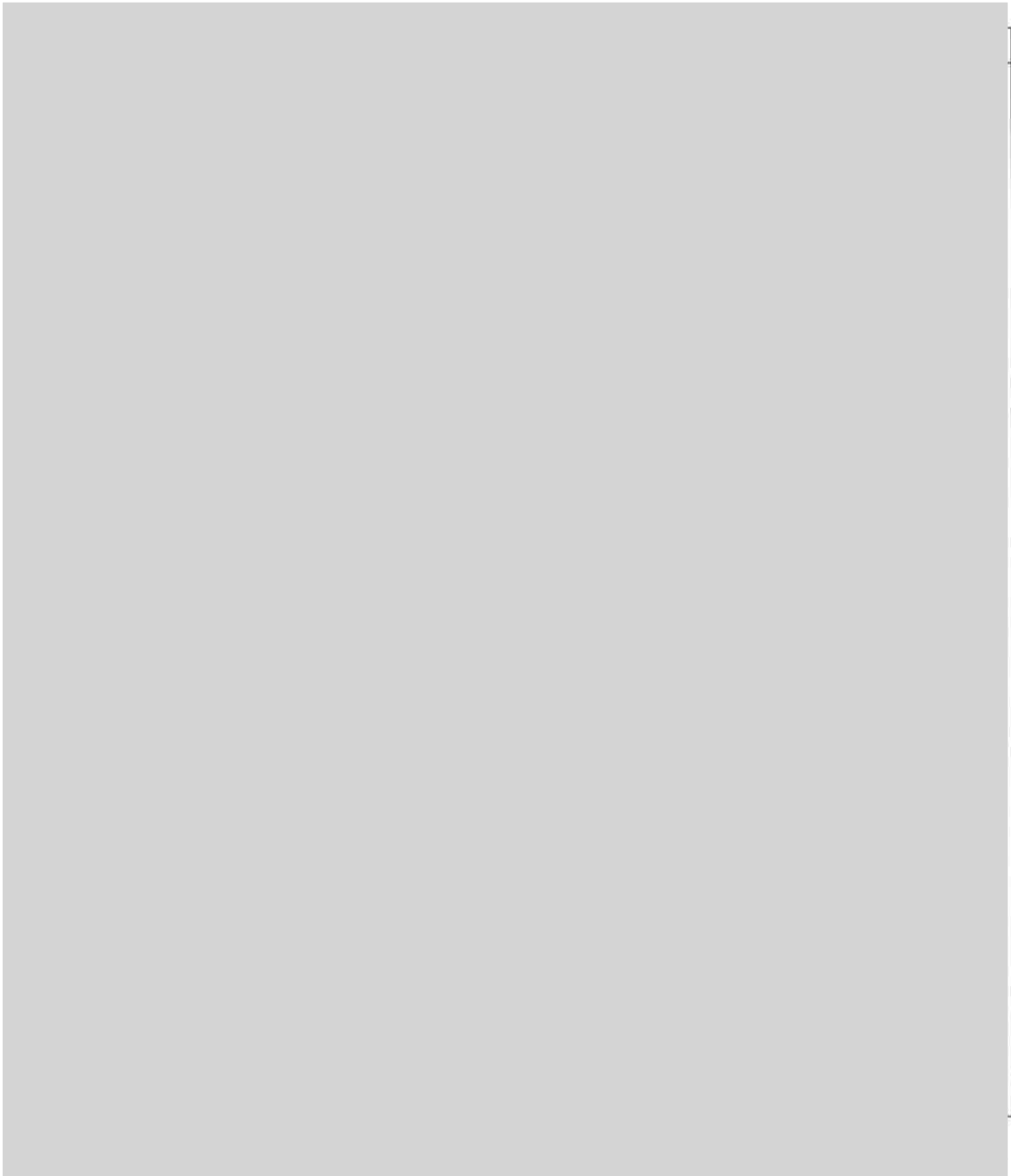
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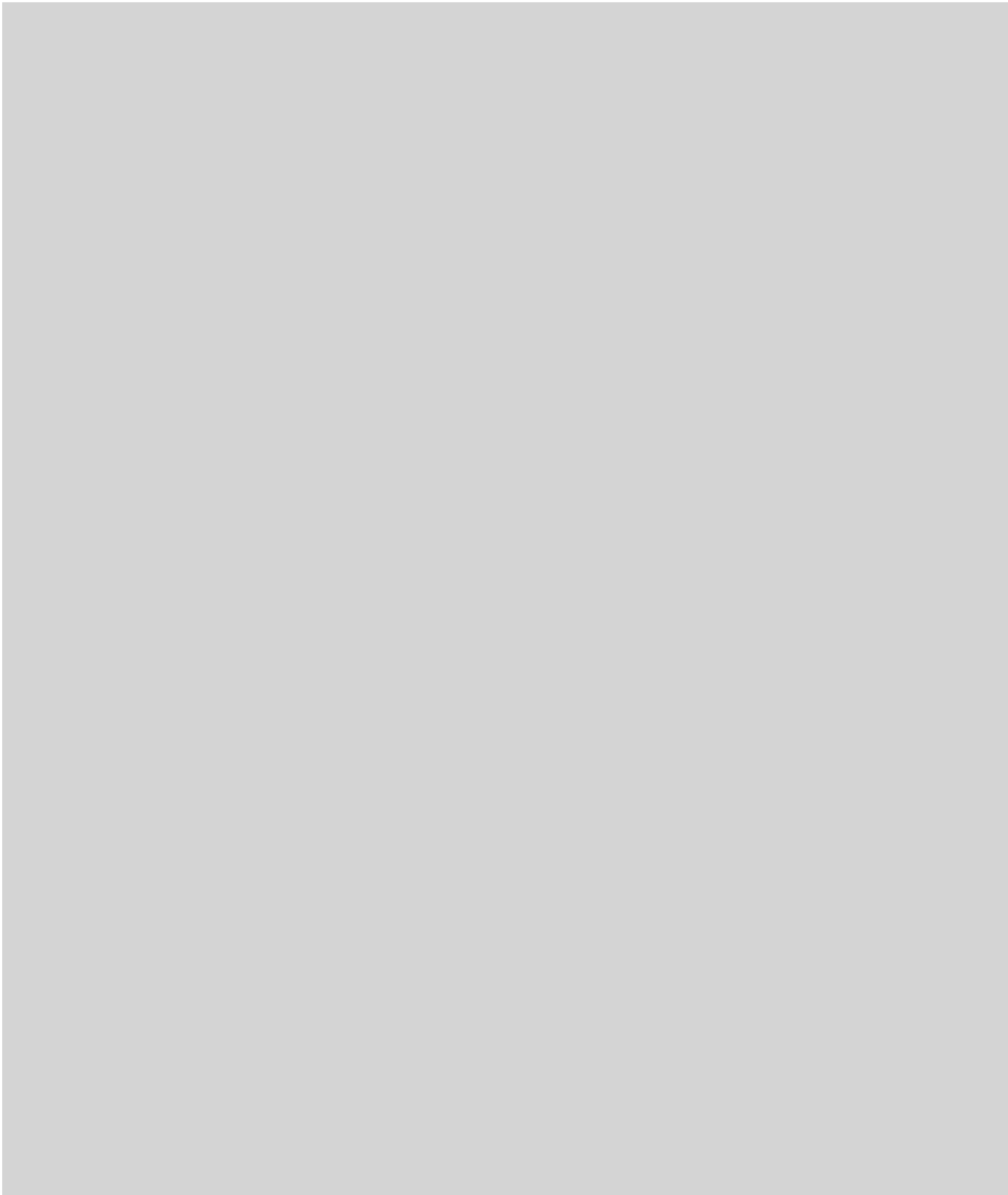
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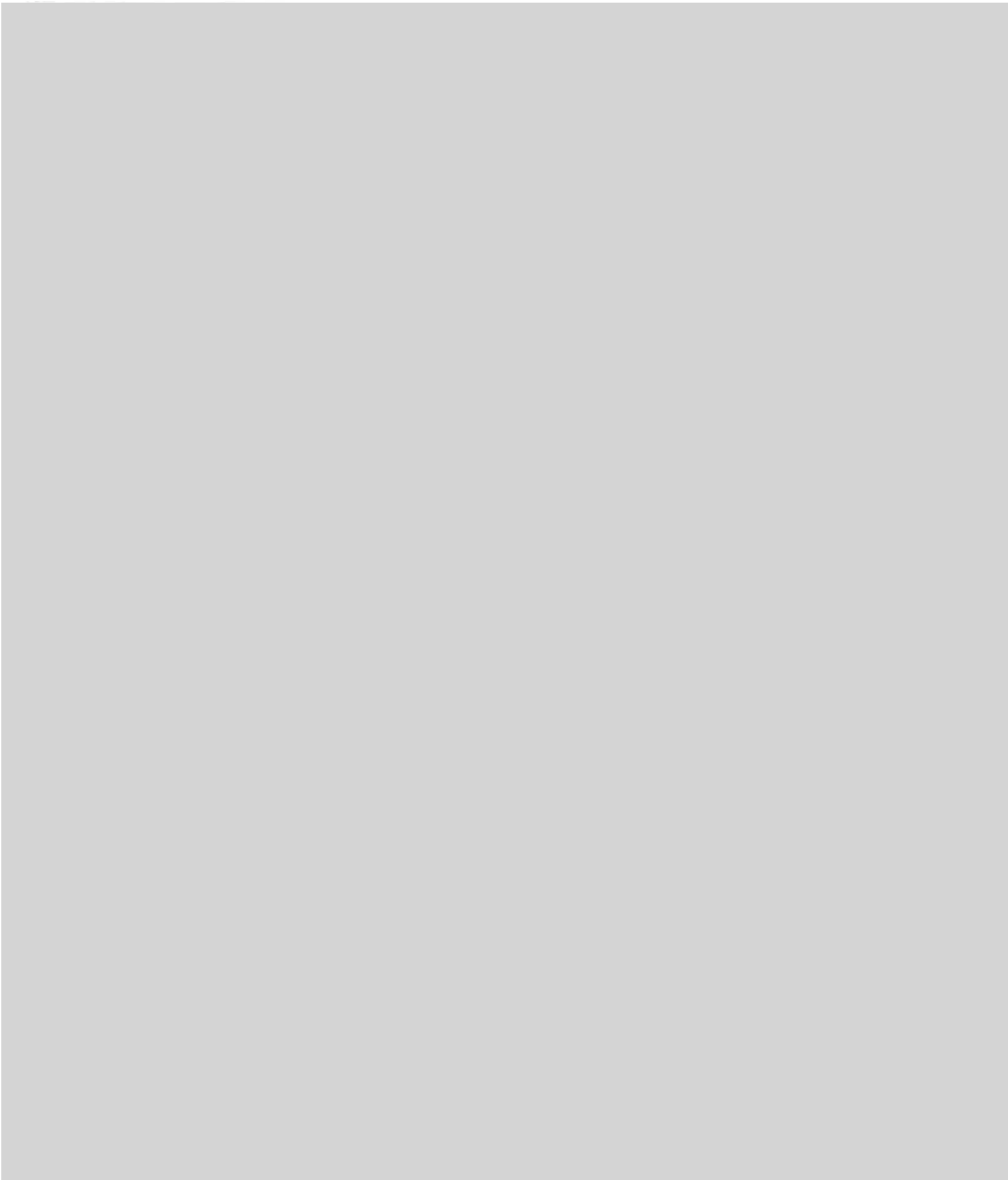
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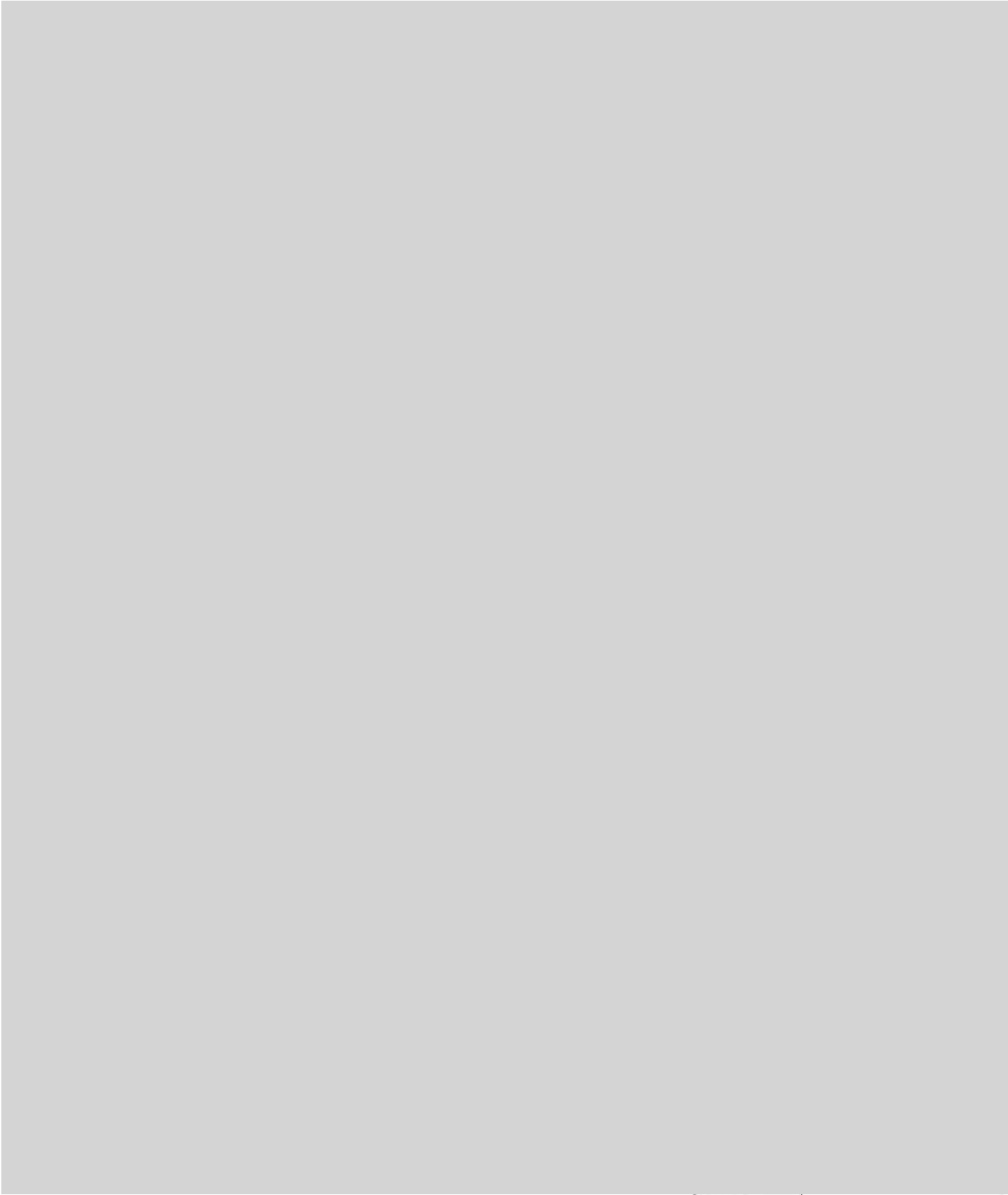
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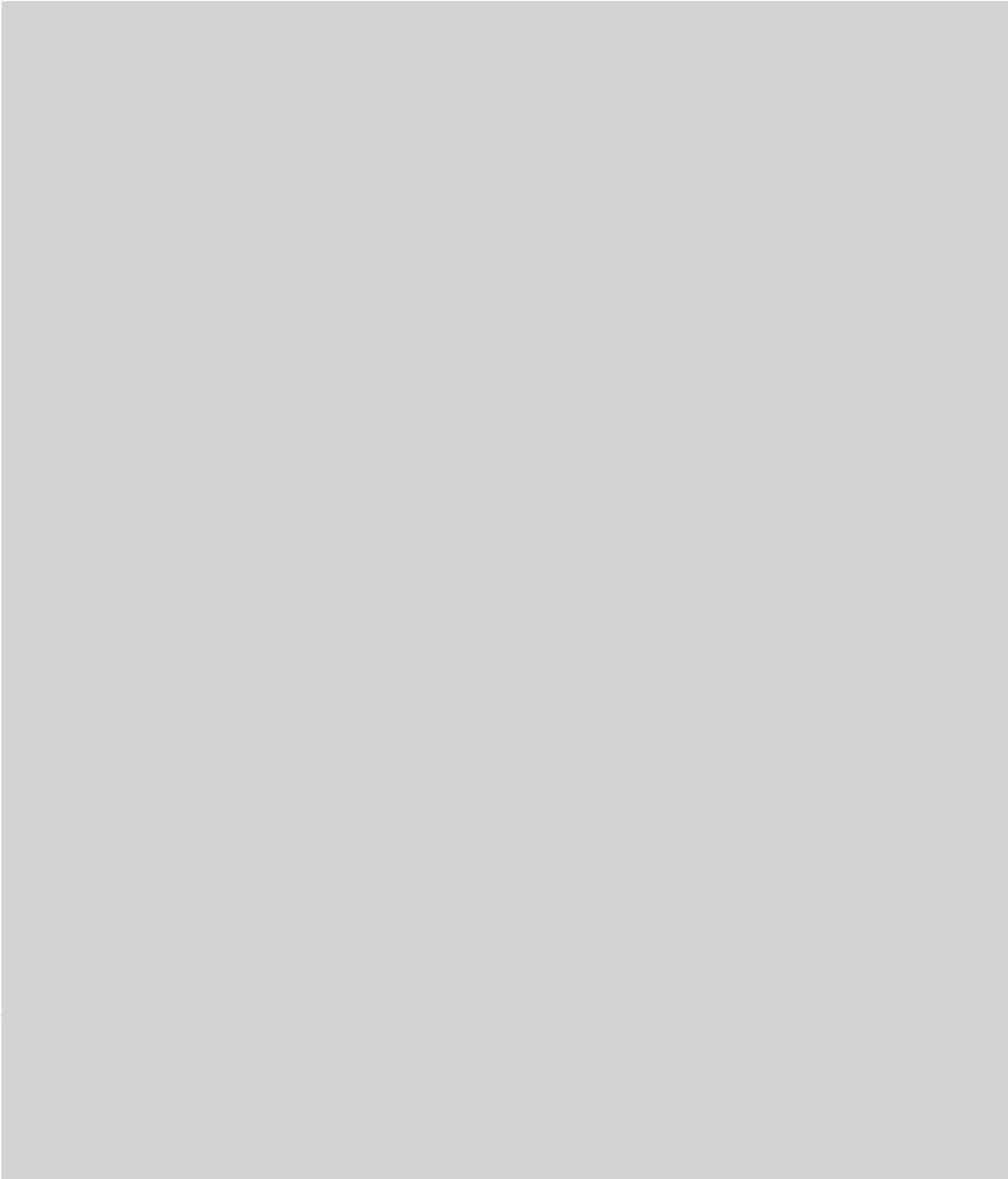
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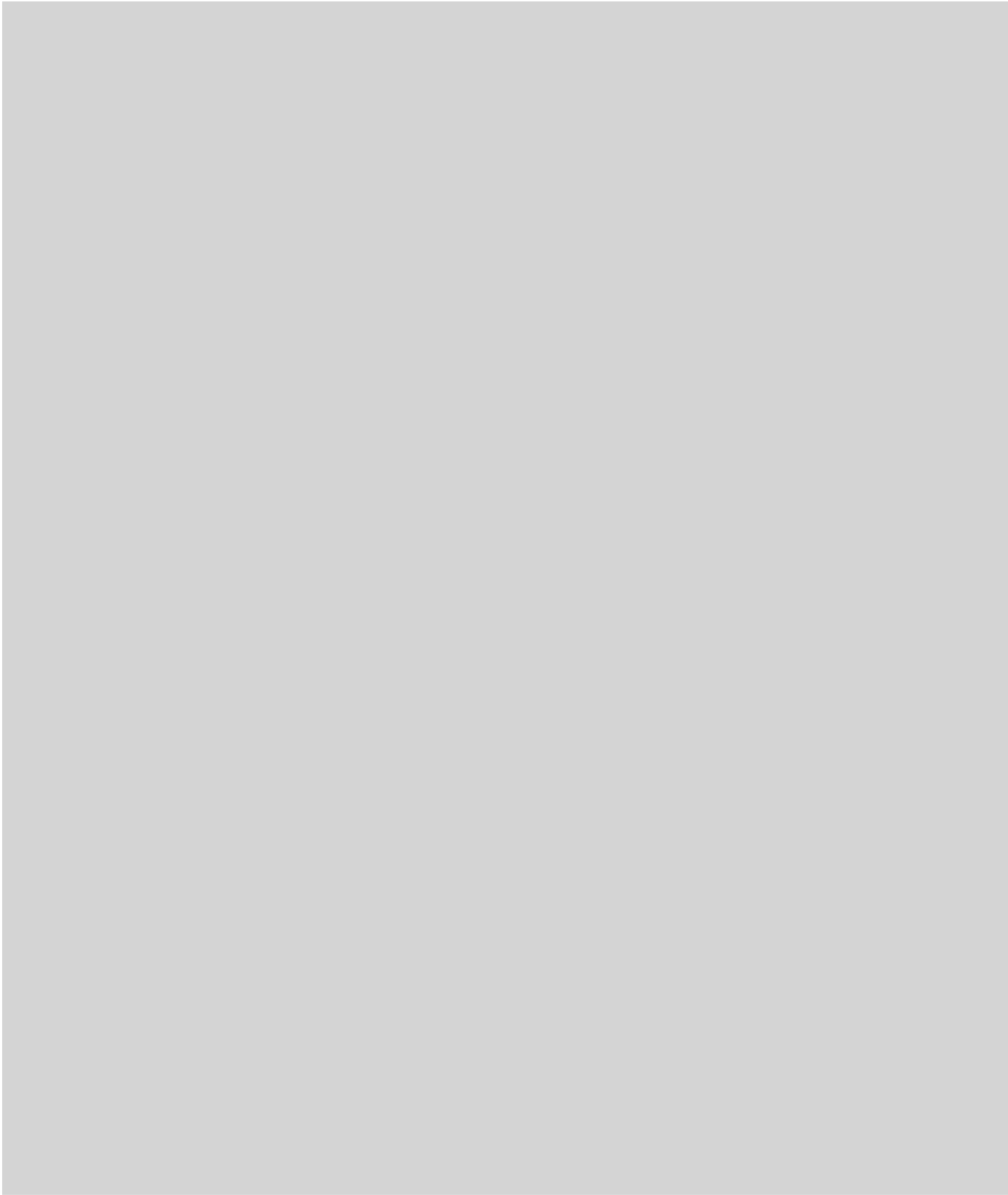
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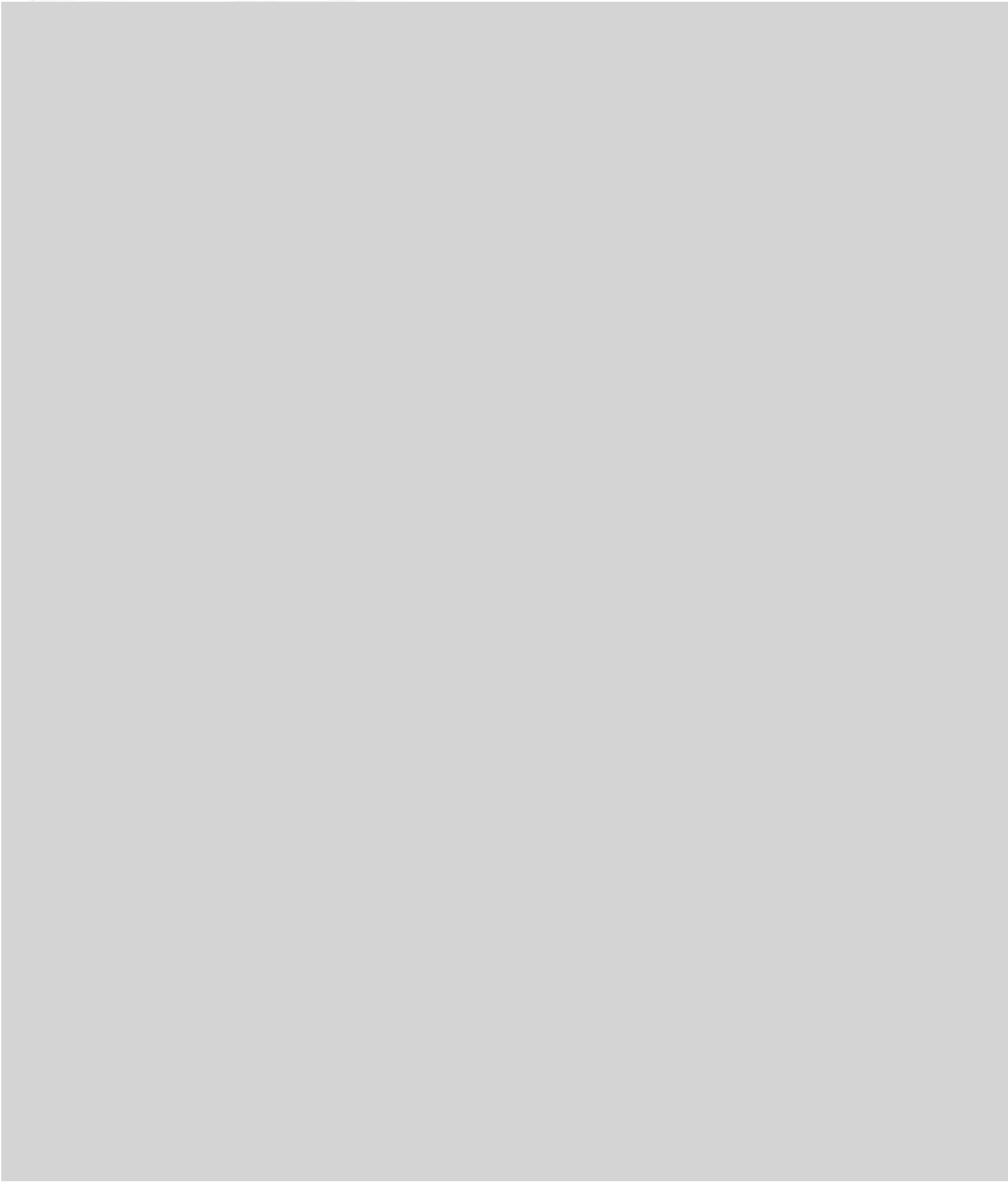
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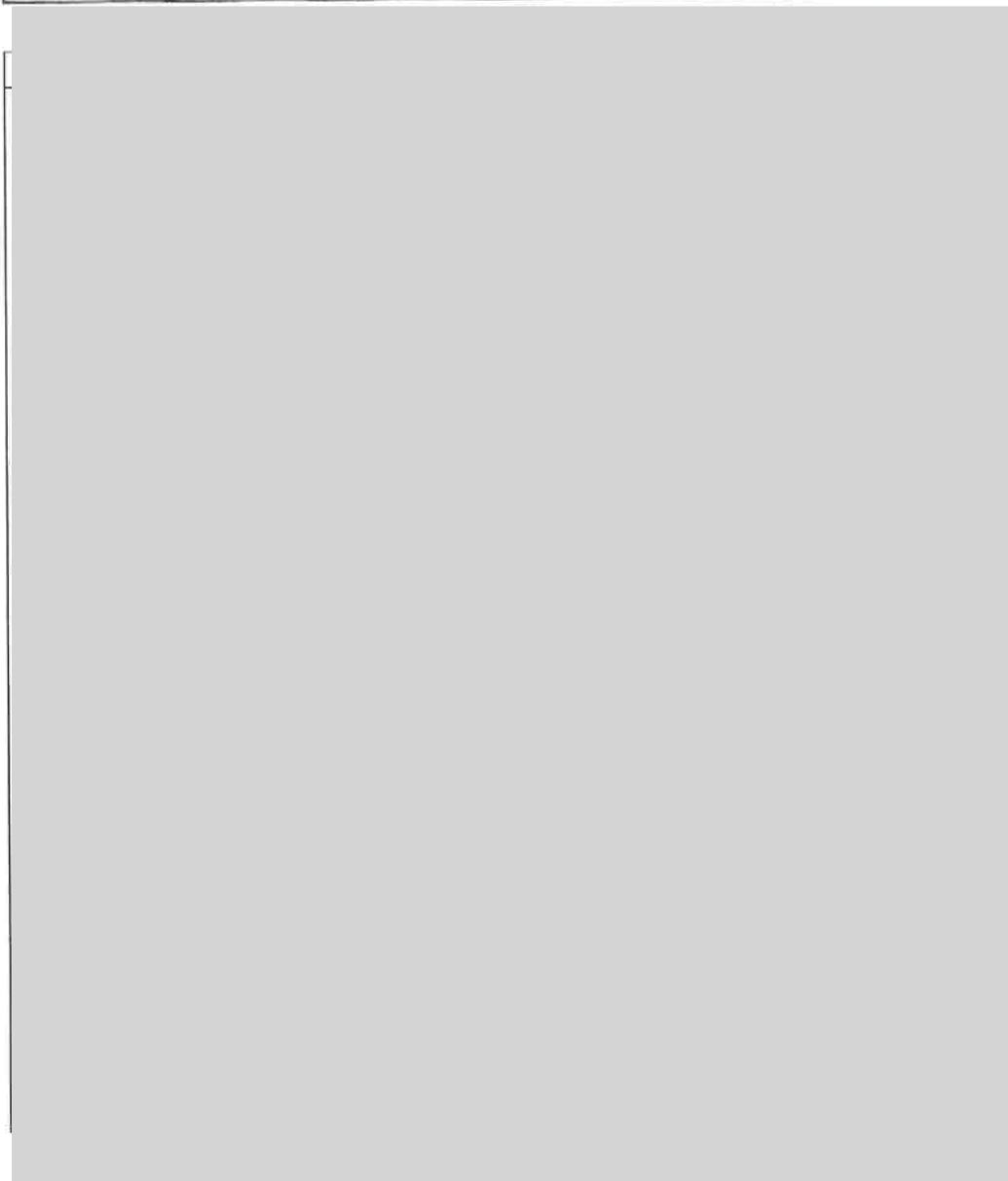
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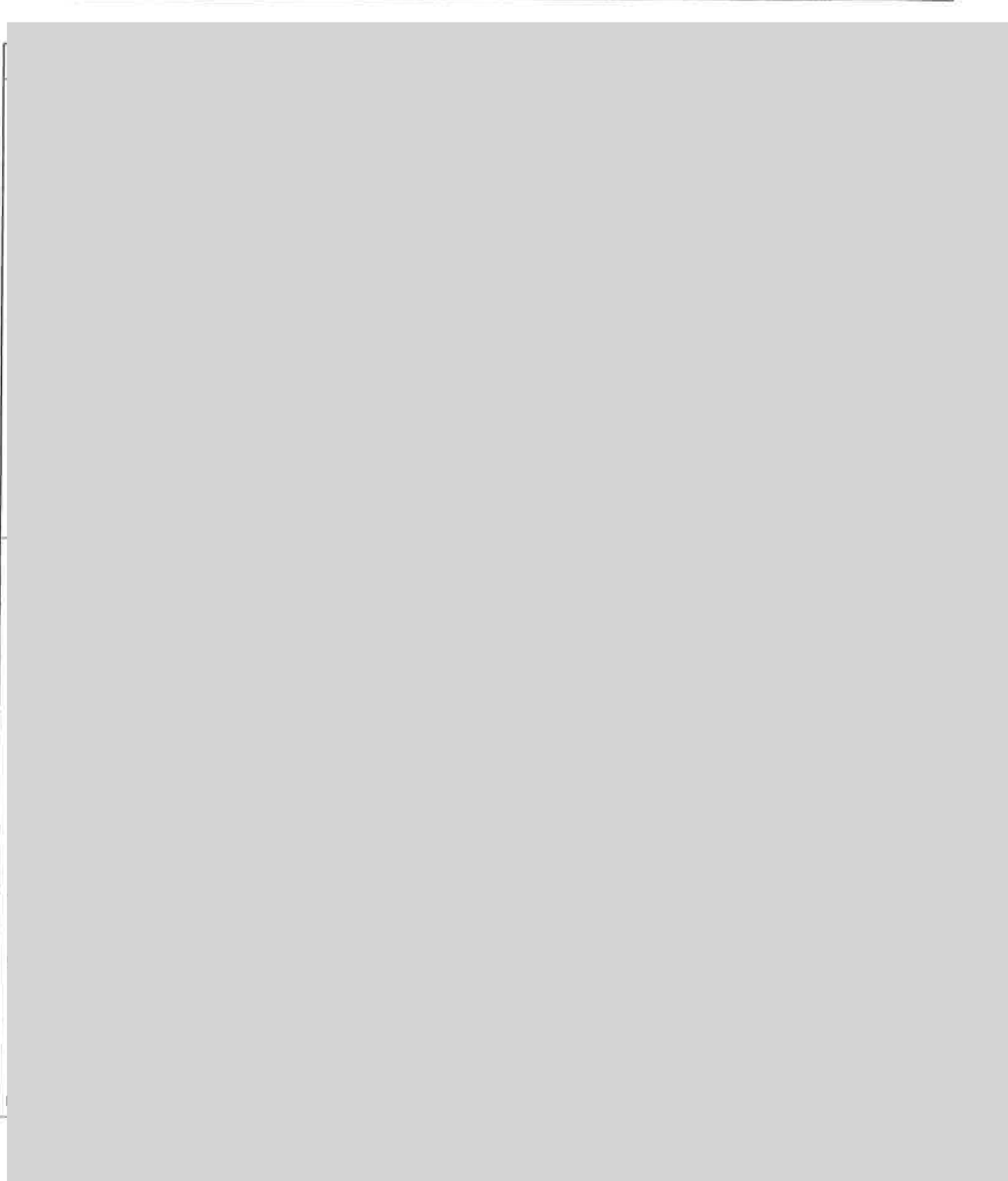
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	Logistics Delivery		2024/08/01 WI-LOG-001	Rev. : 05



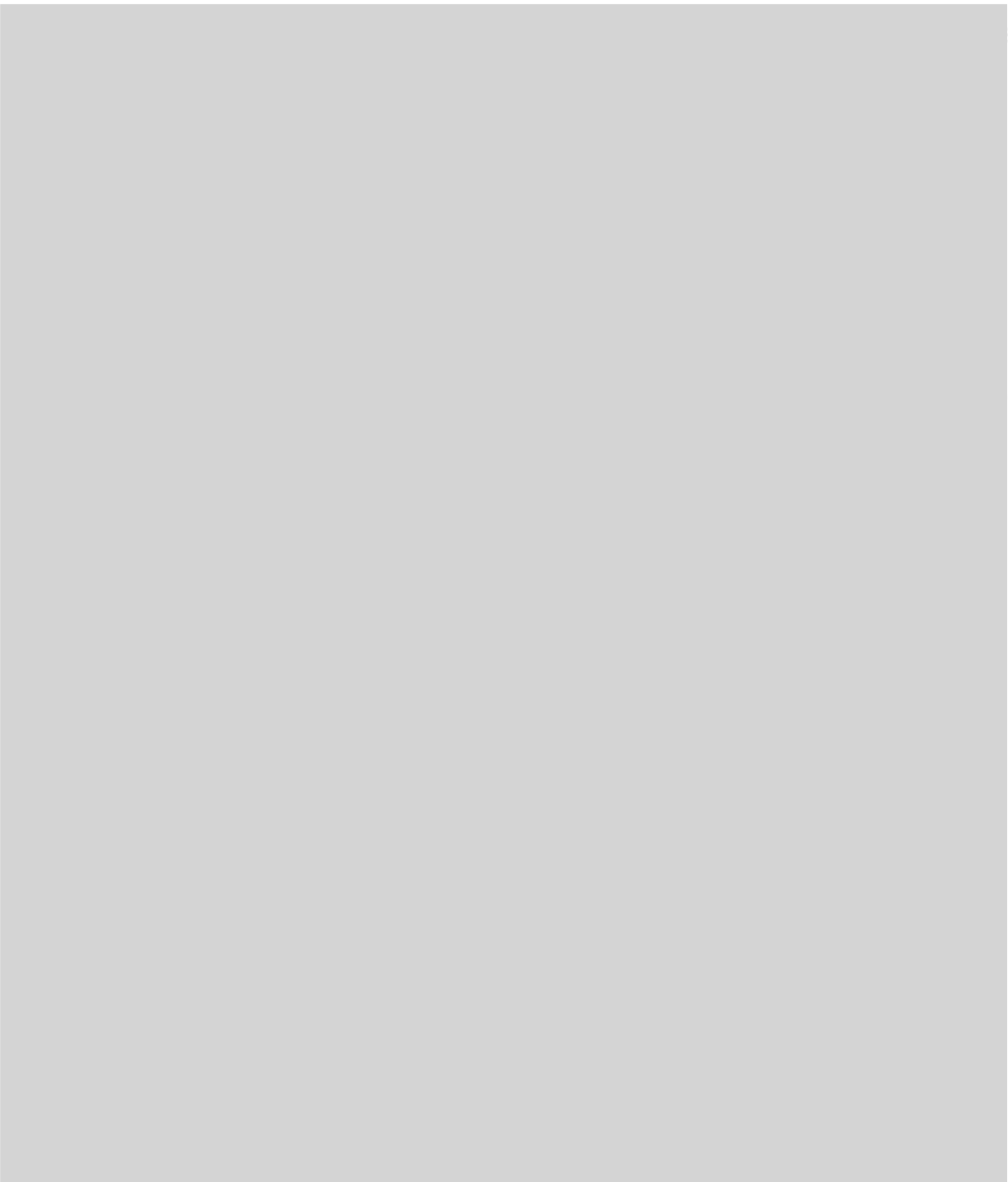
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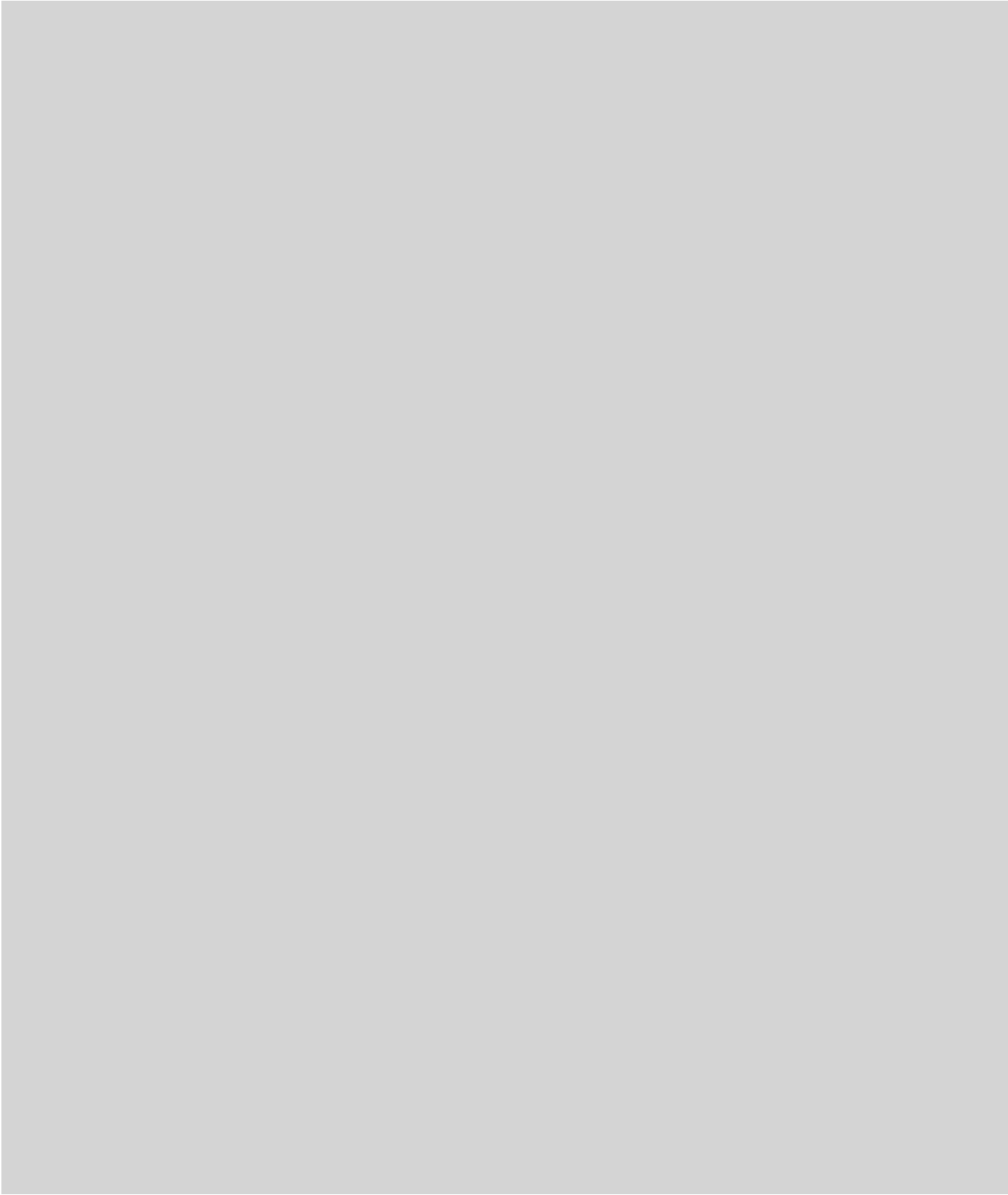
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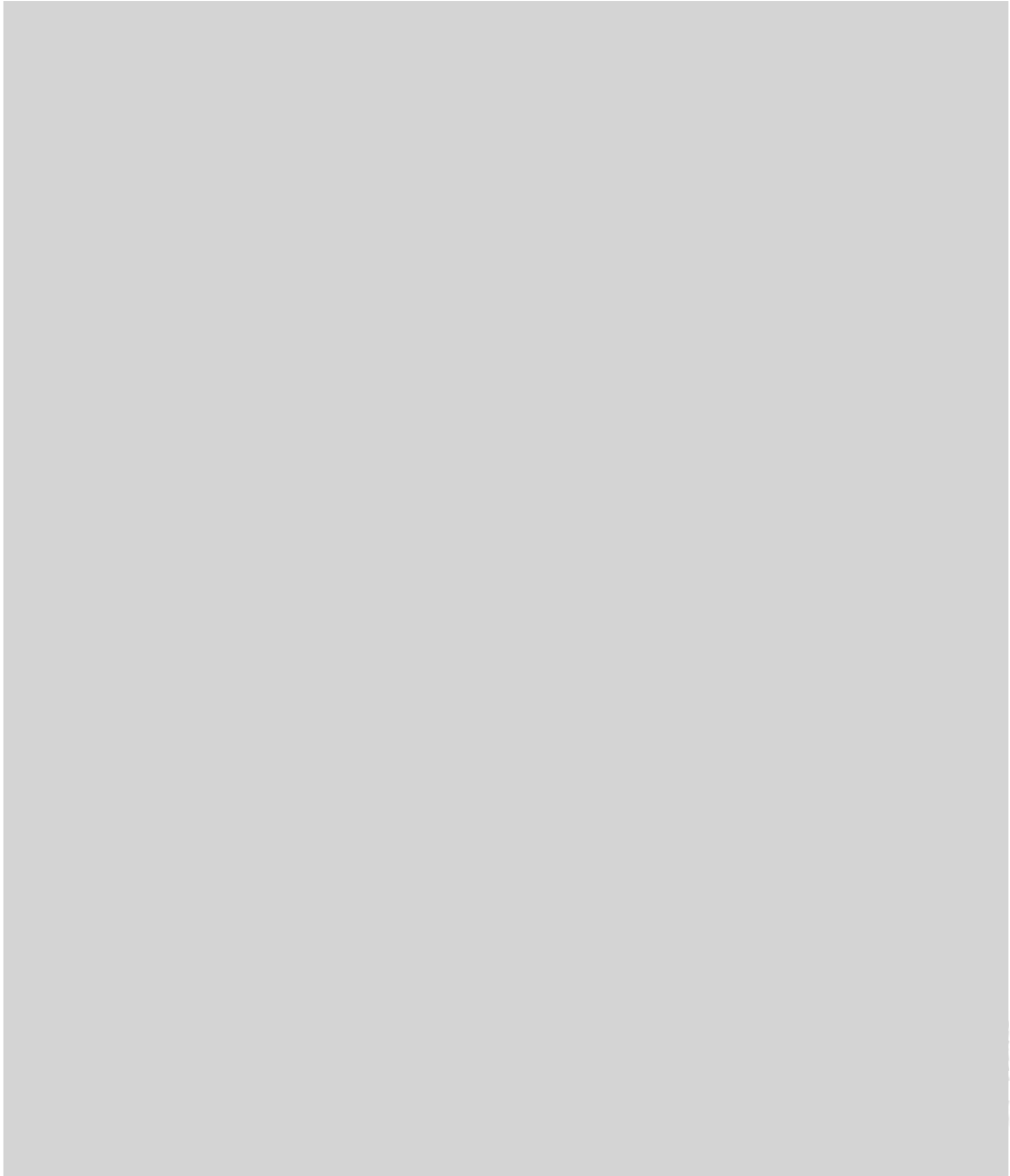
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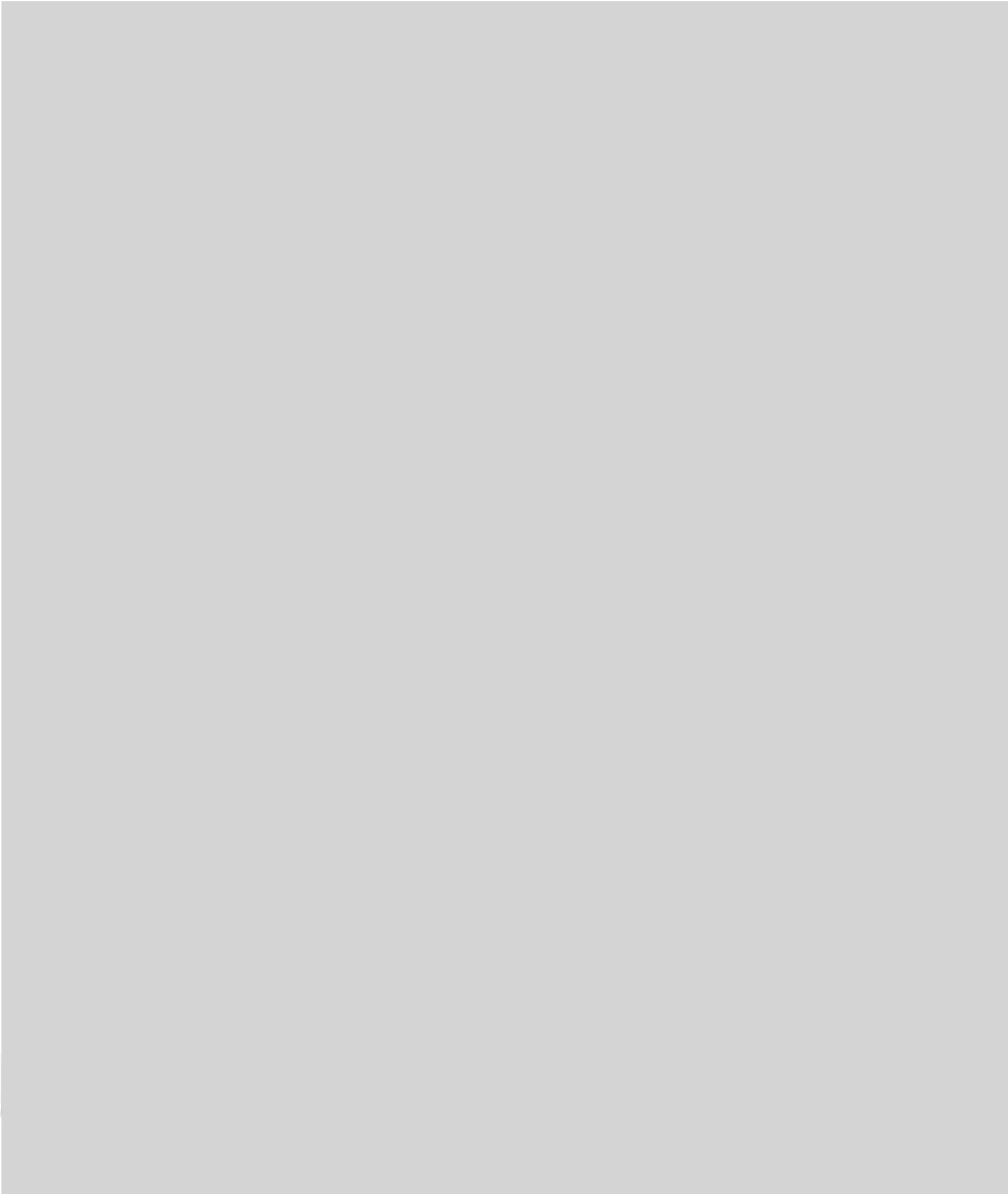
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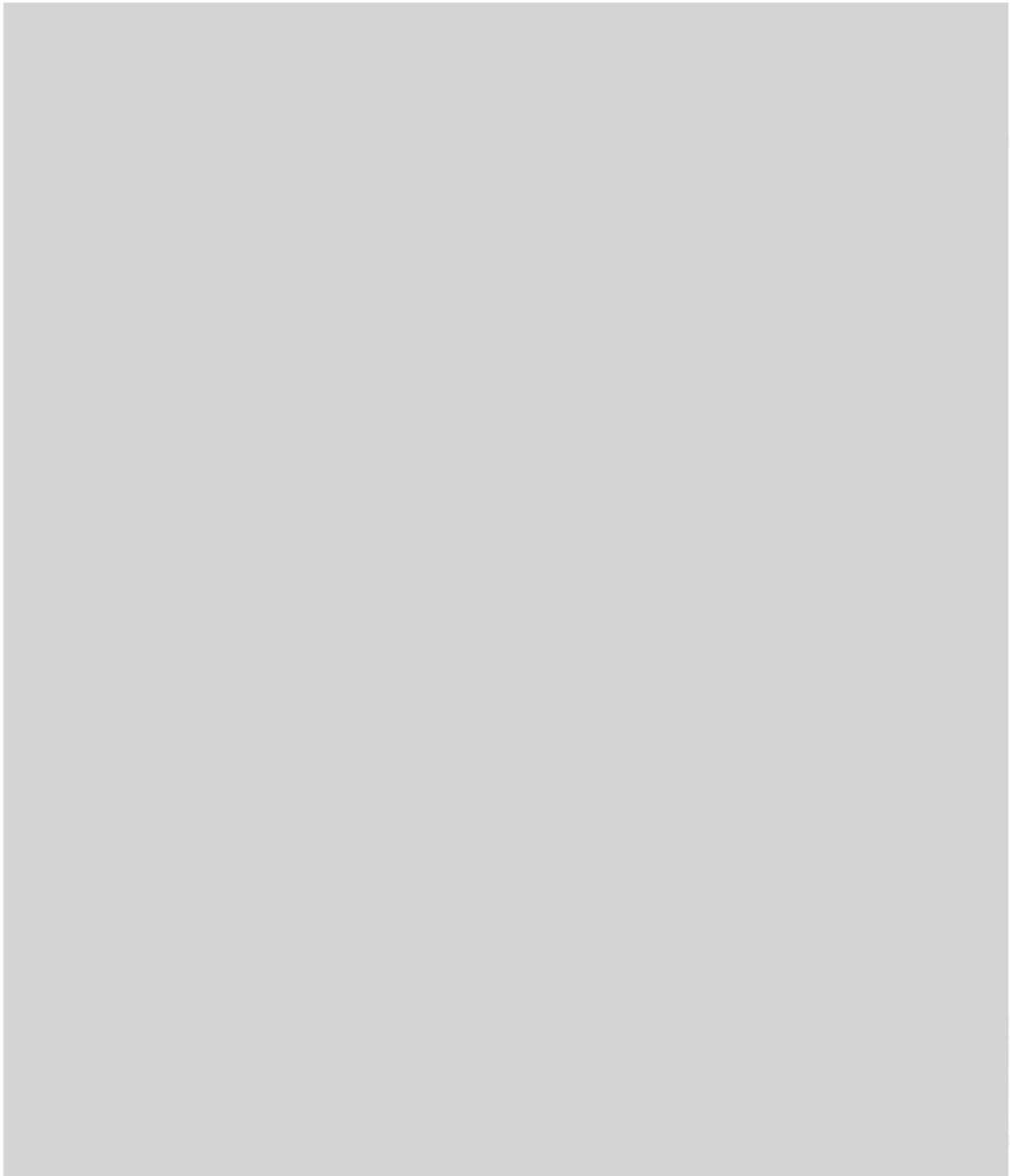
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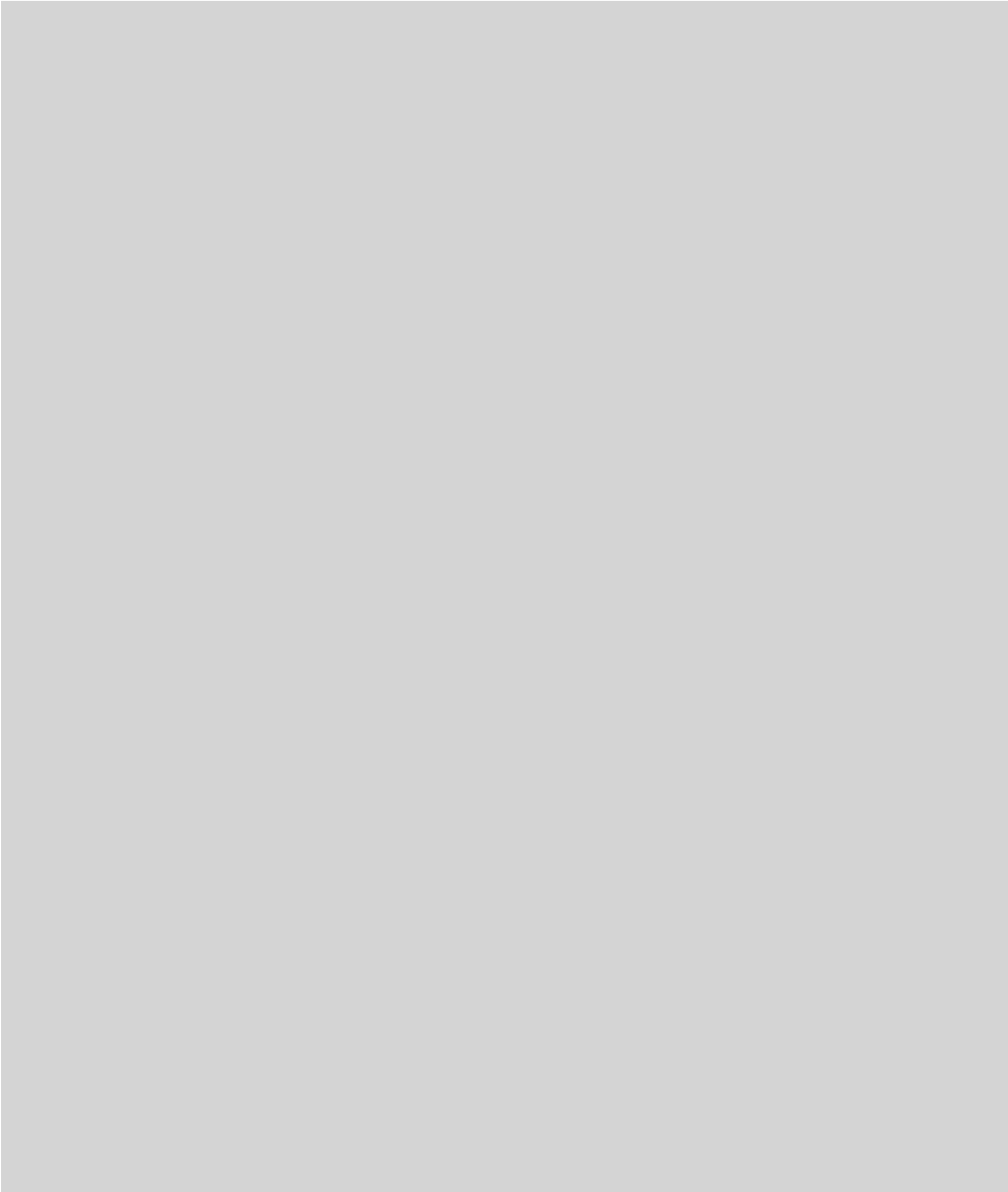
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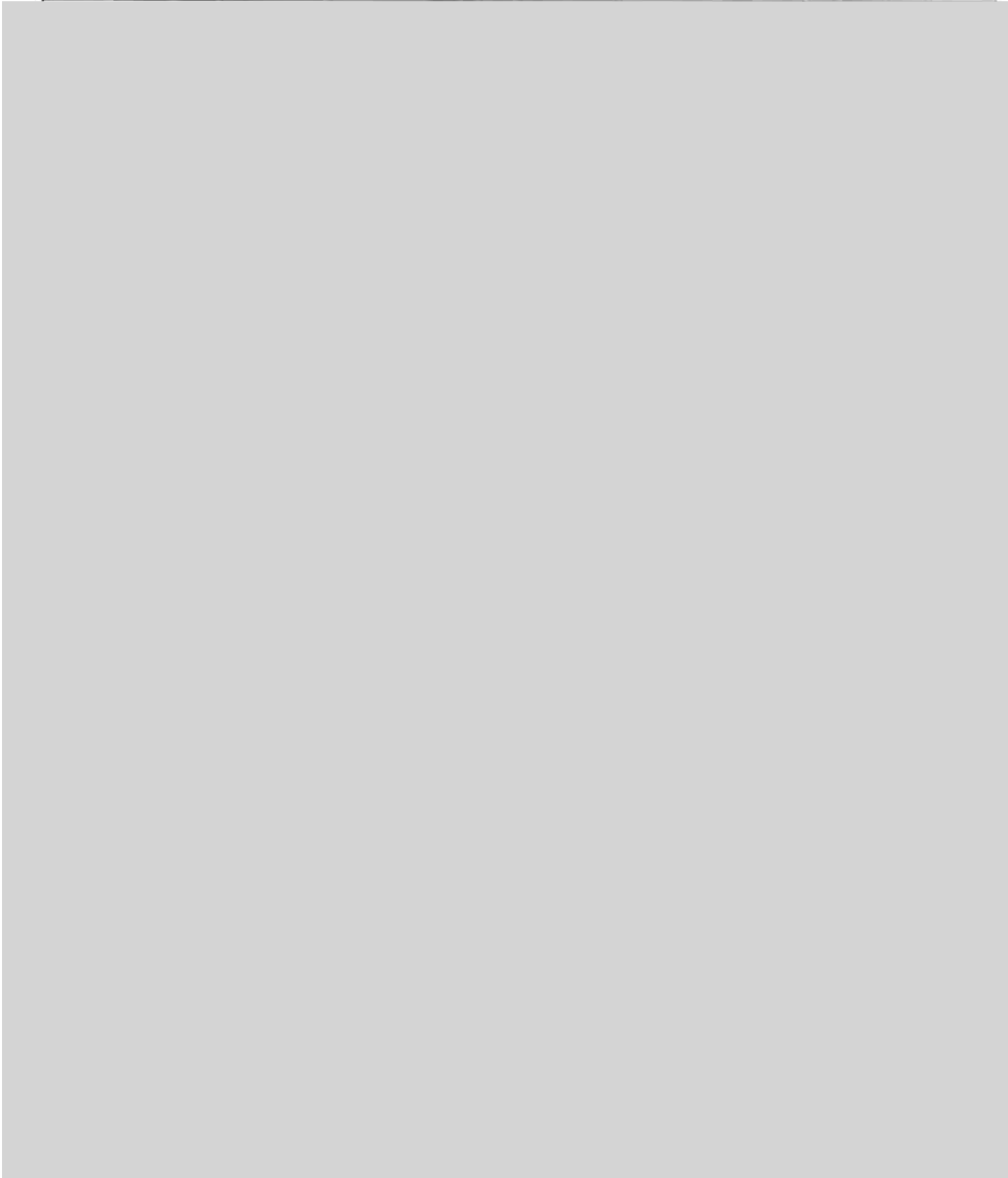
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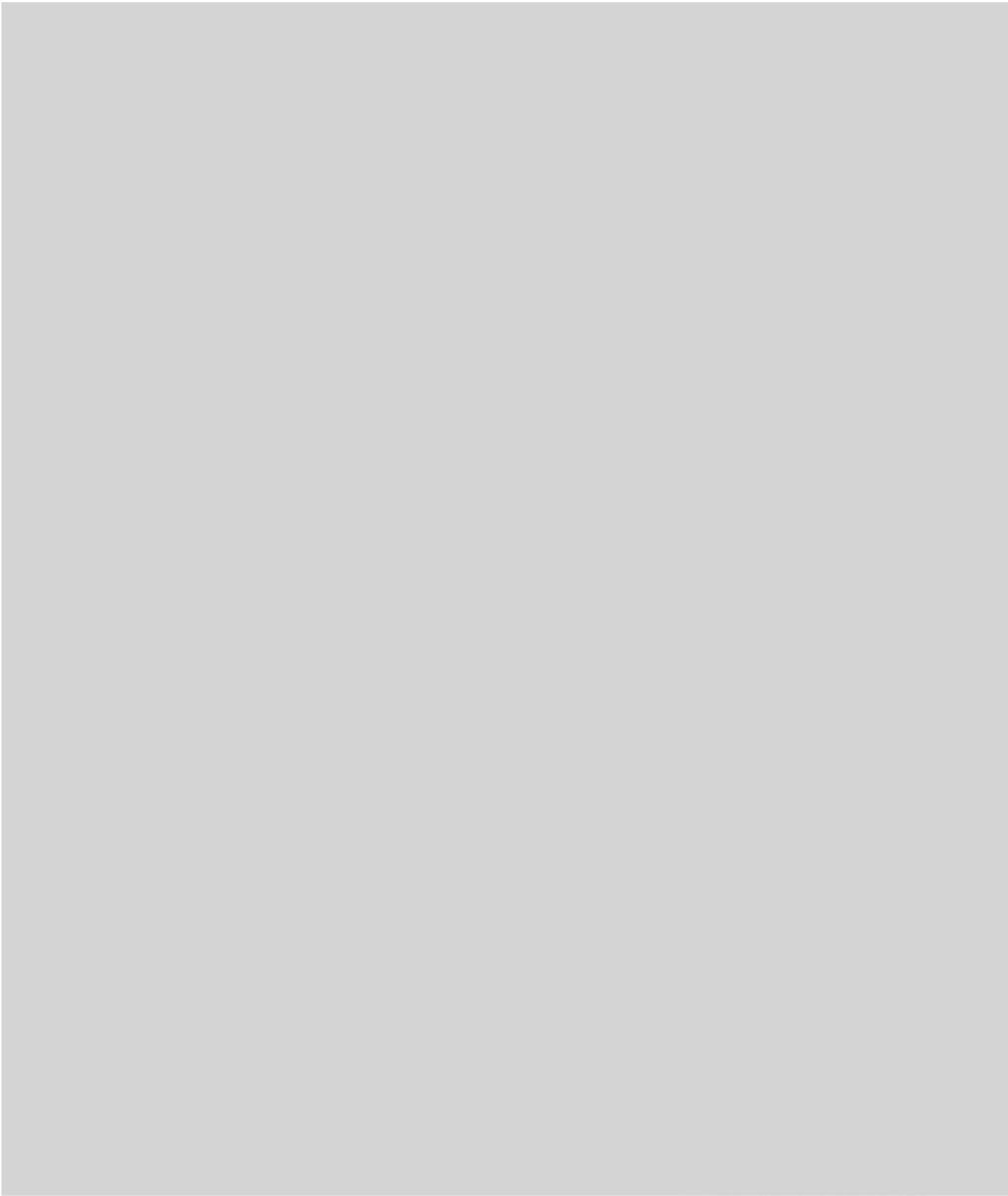
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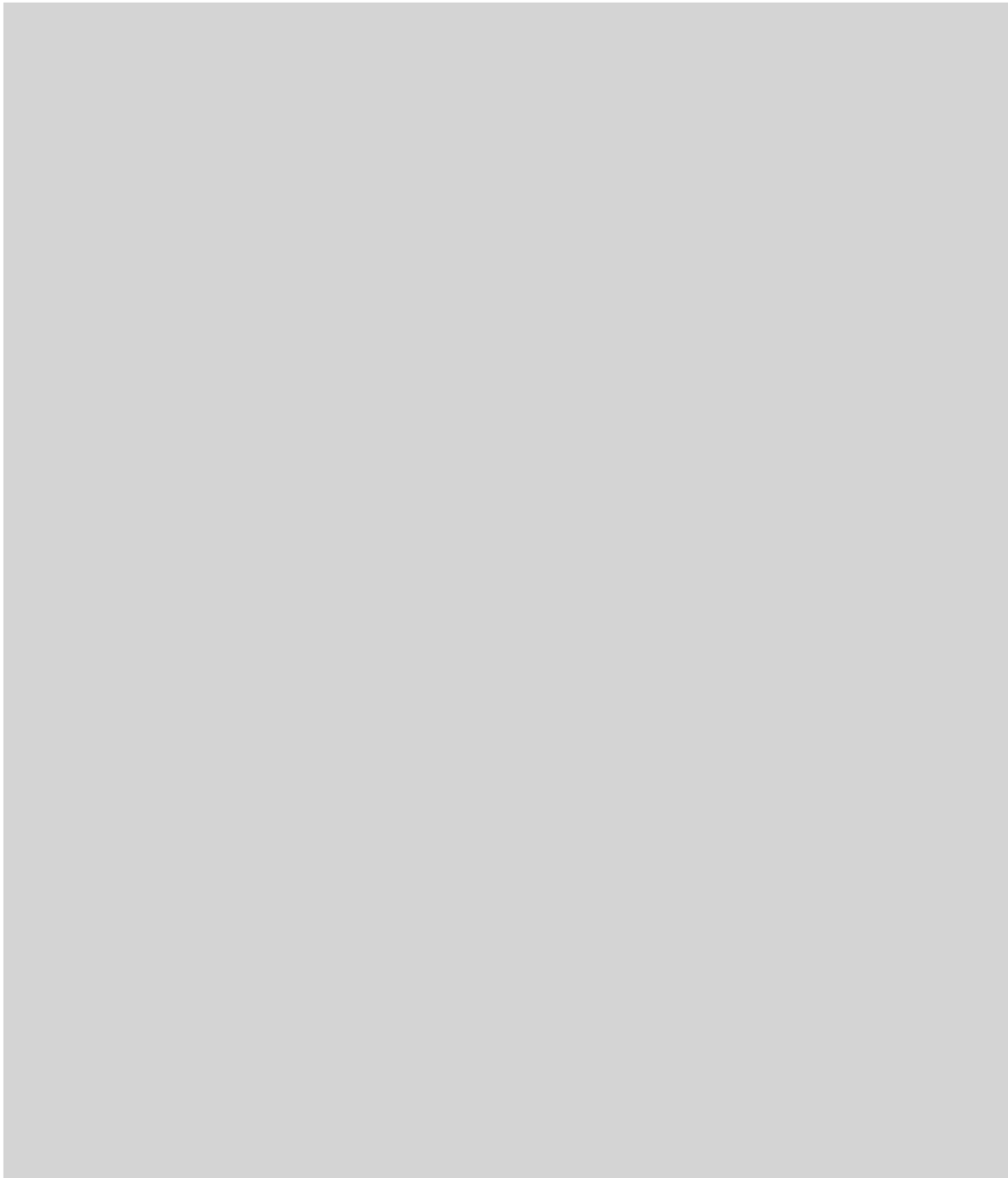
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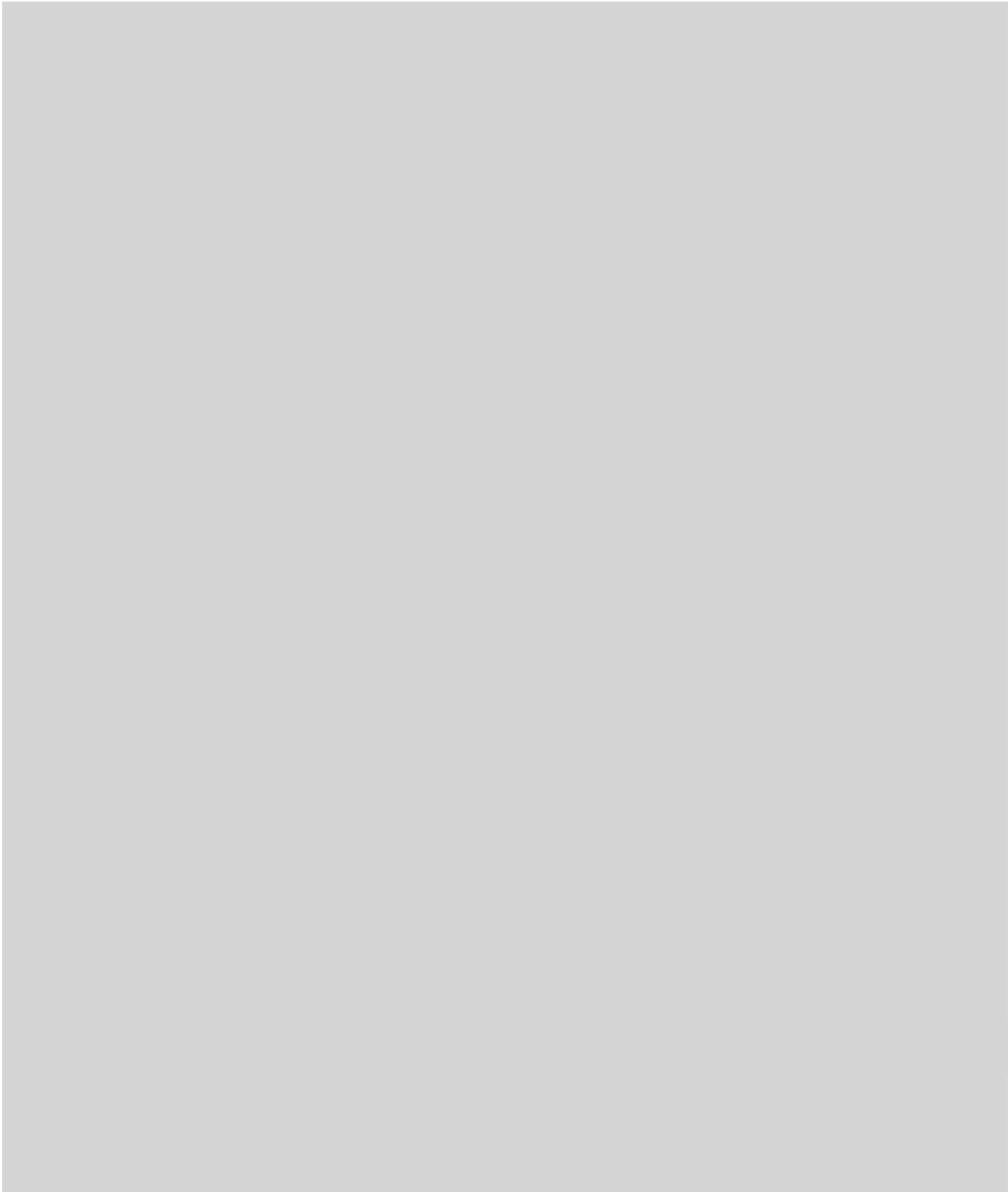
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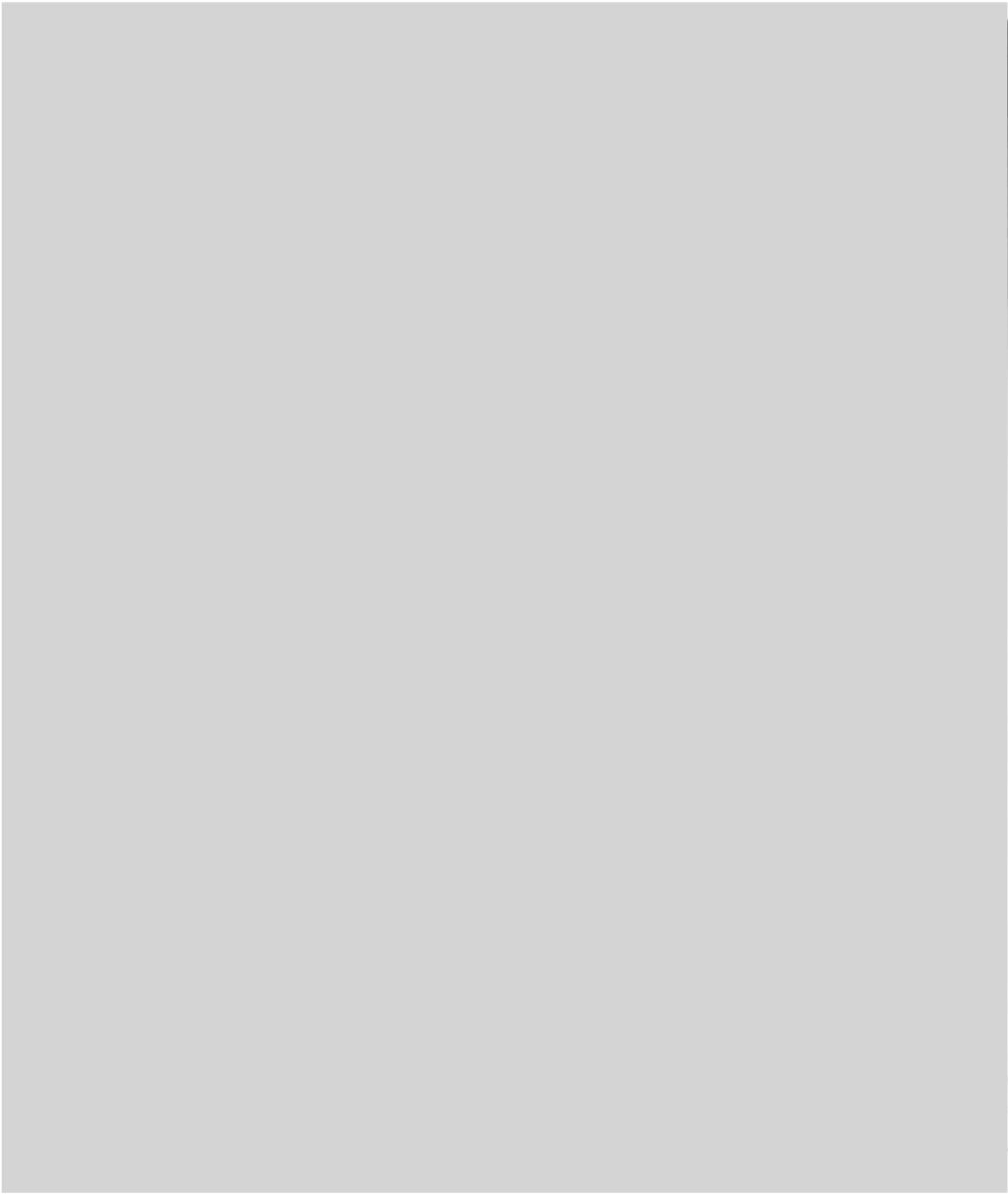
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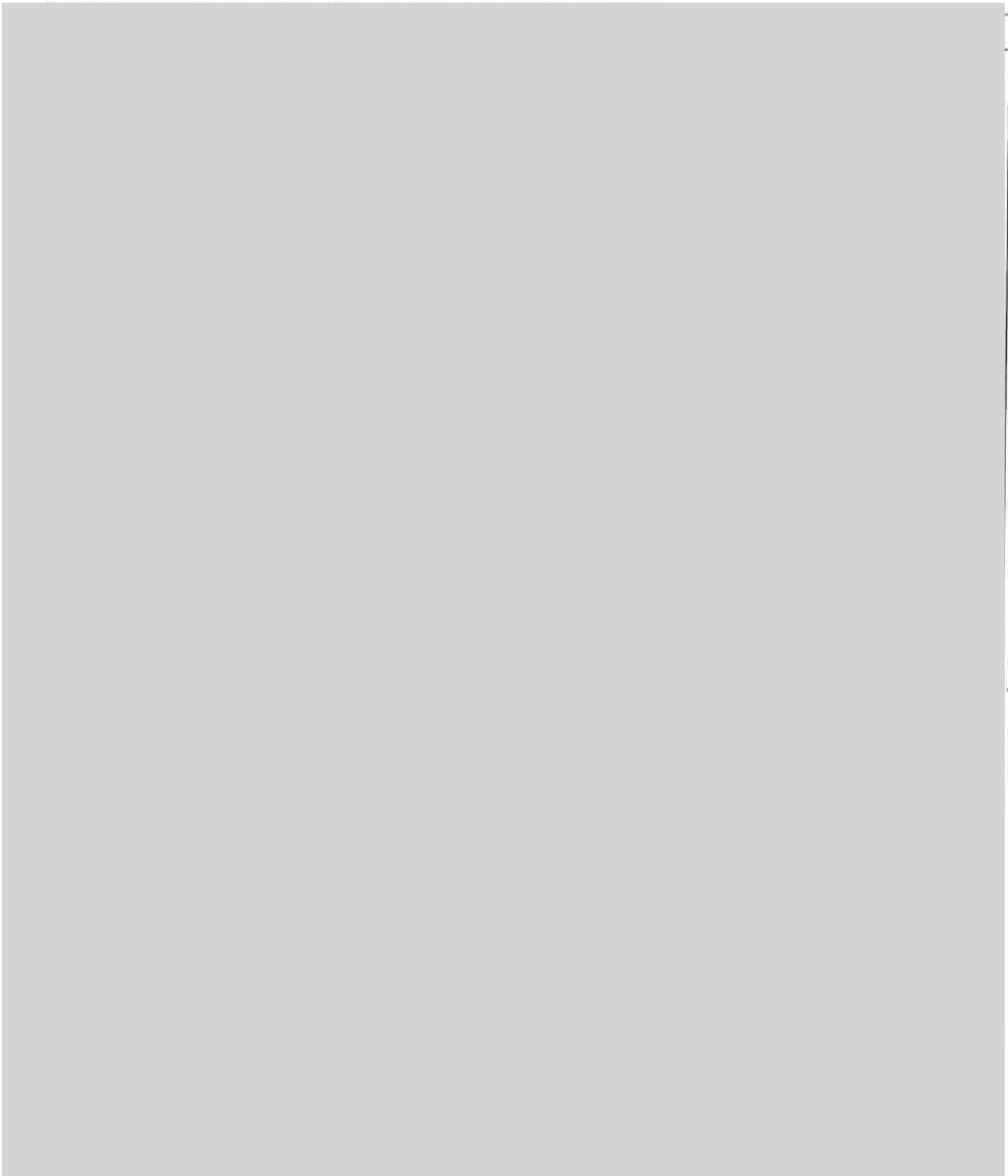
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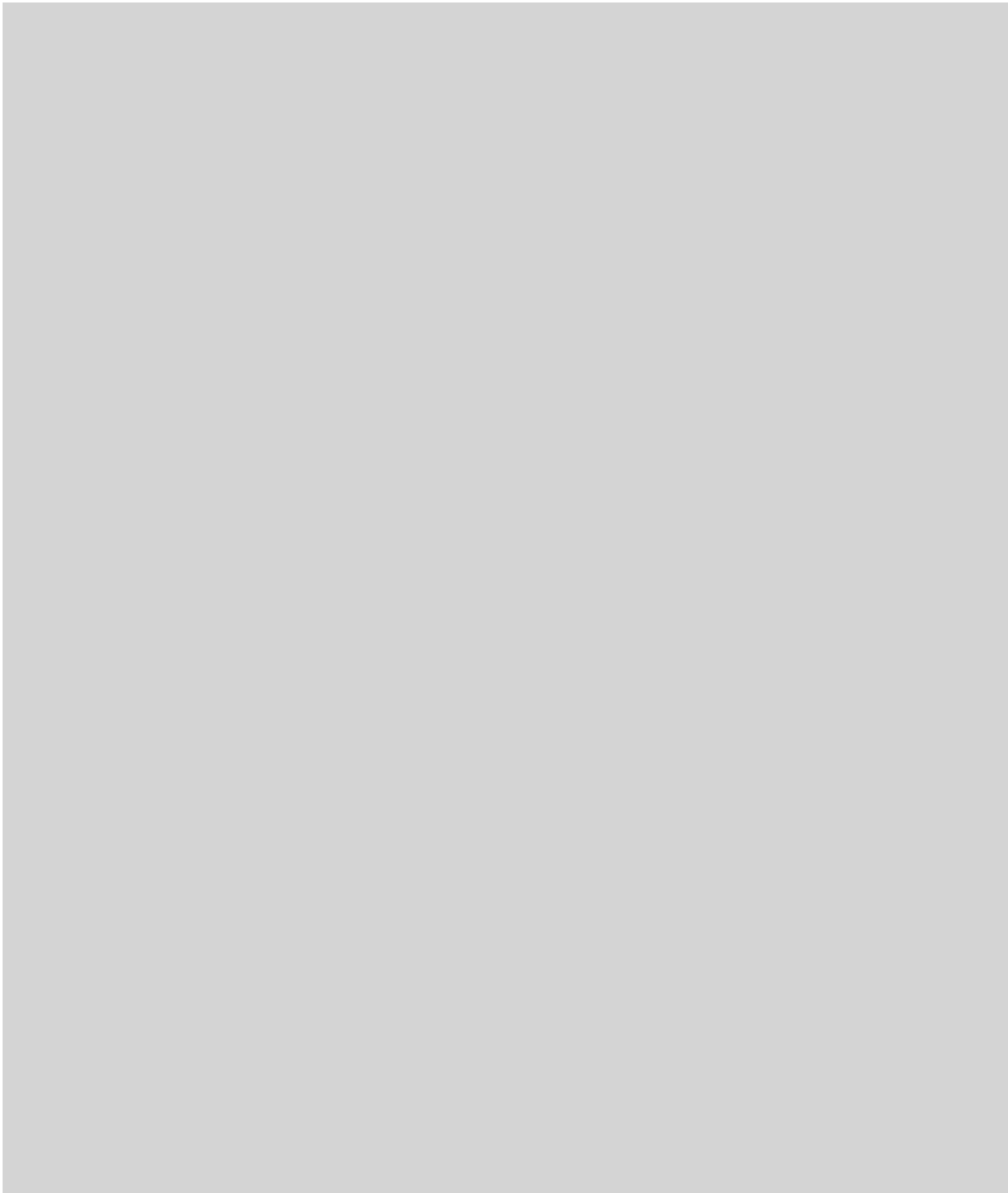
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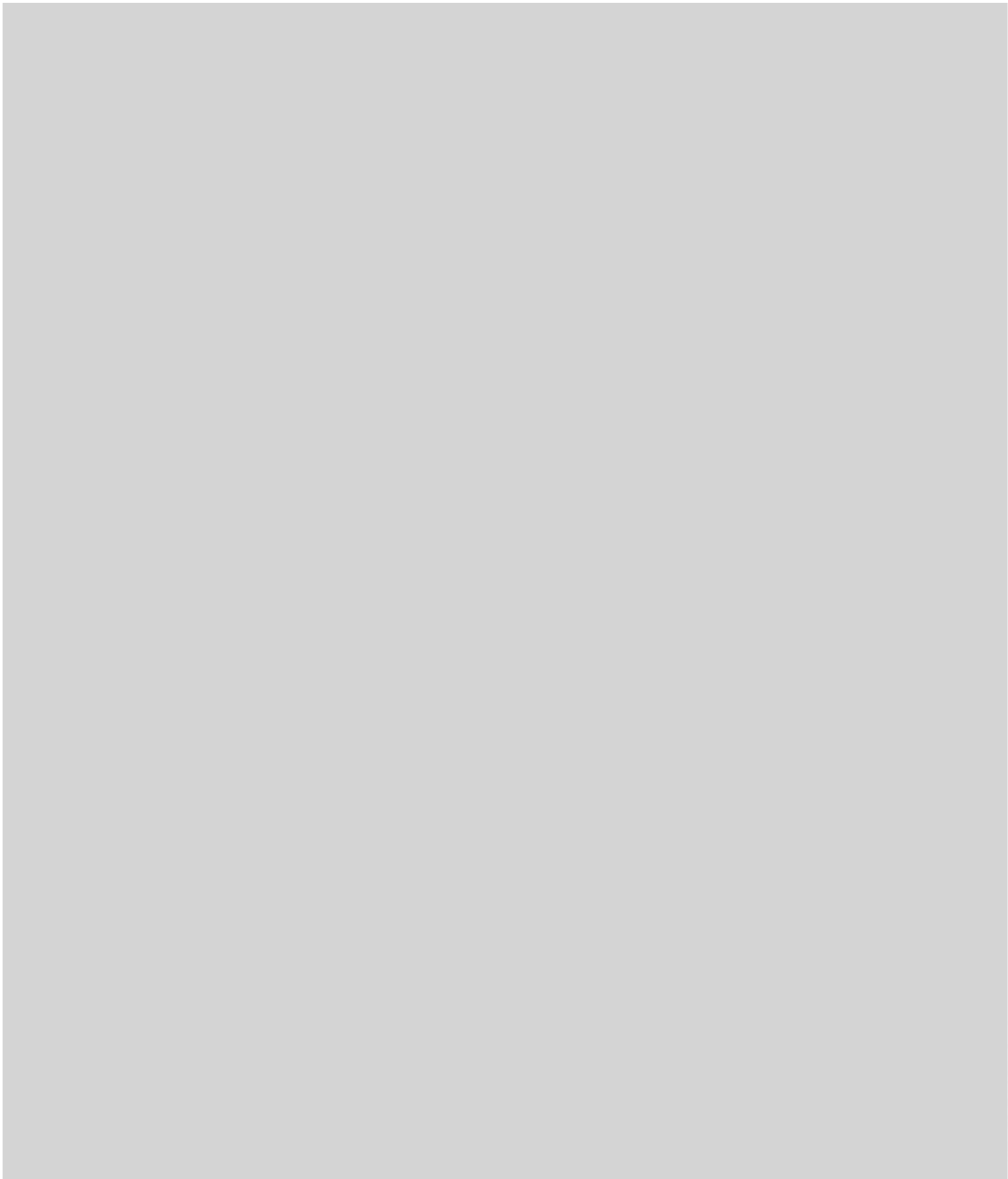
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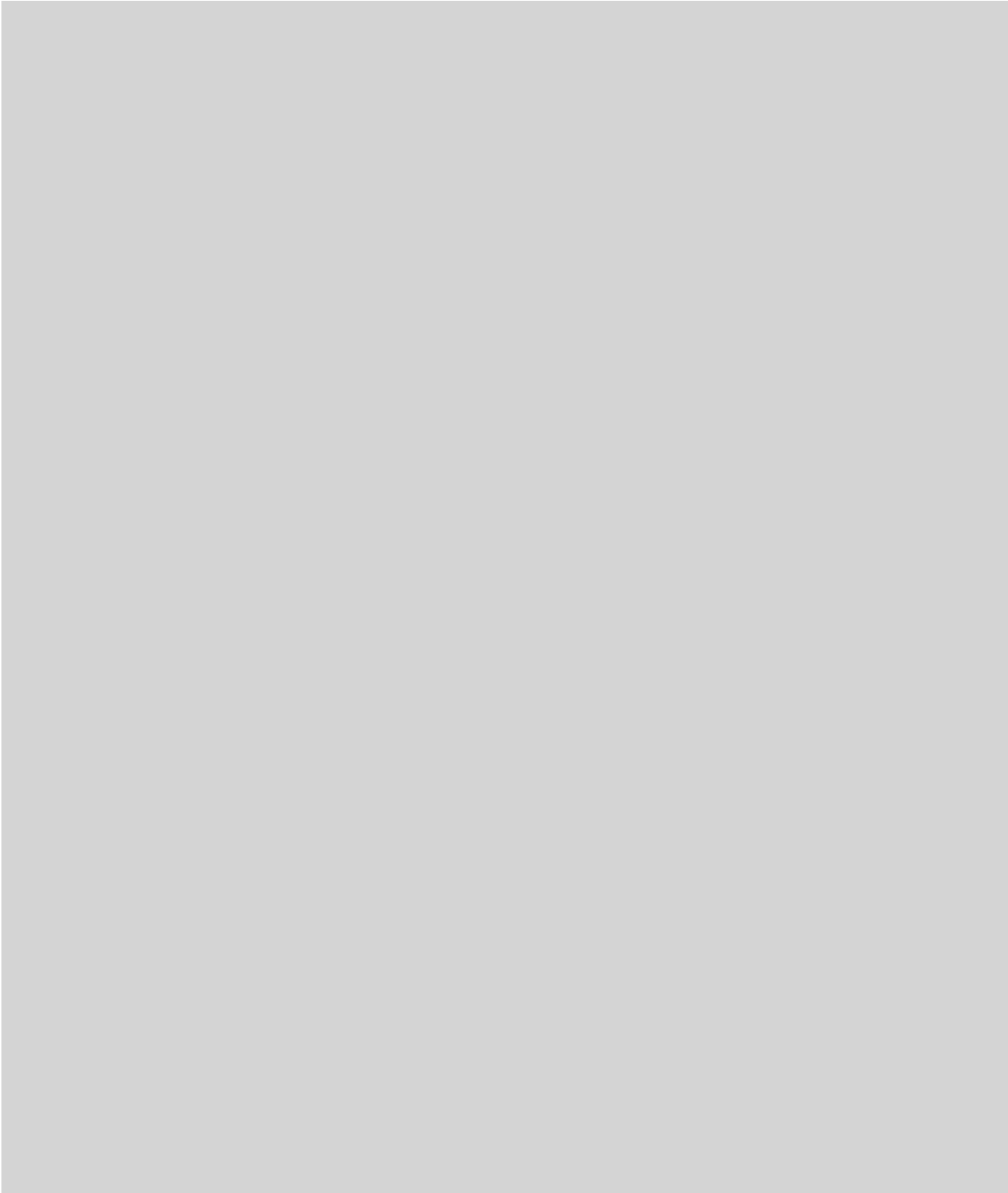
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	Level 1		WI-LOG-001	Rev. : 05



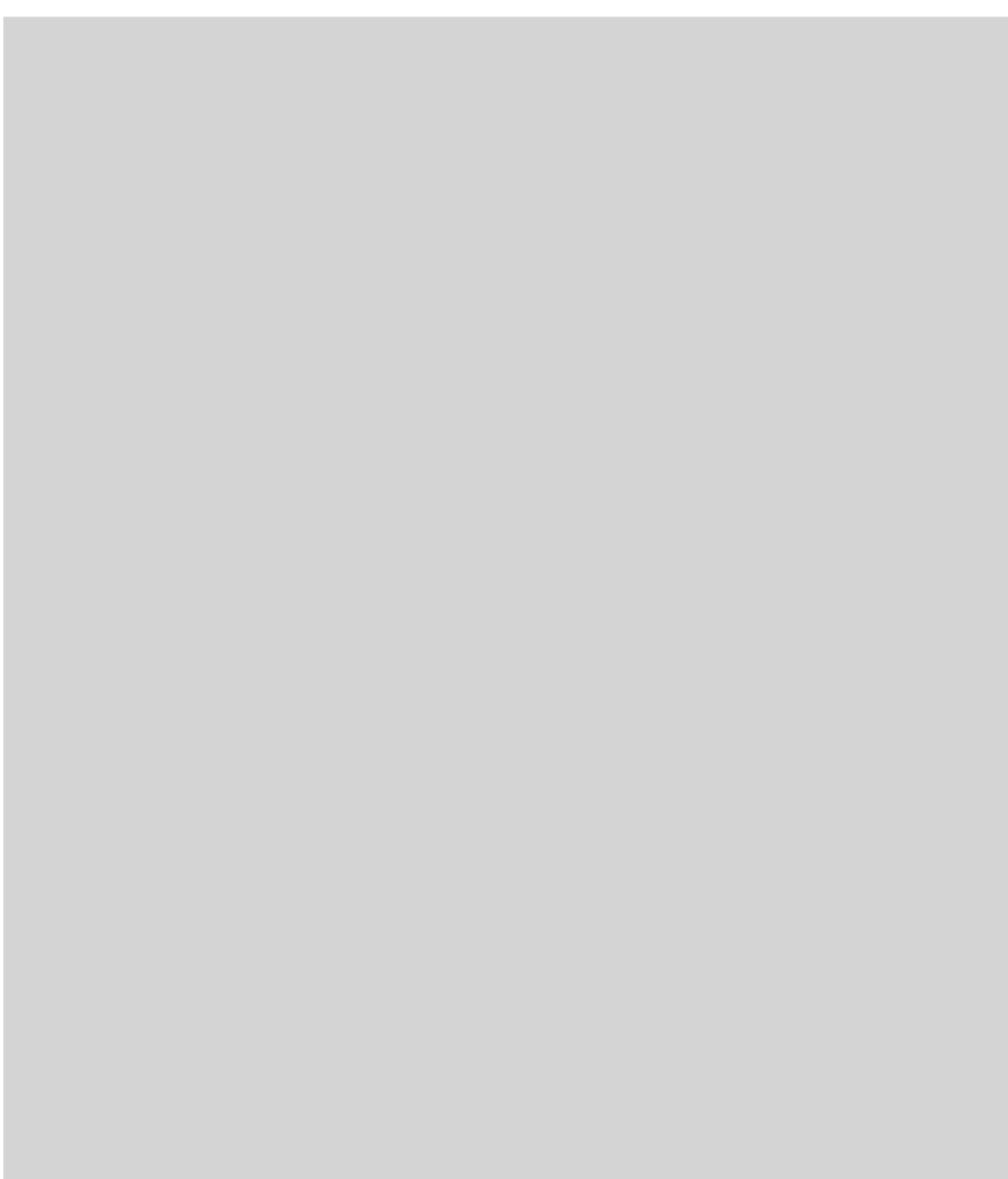
posco TCS	Work Instruction	Work Outline	Enforcement Date : 2024/08/01	Page:46/60
	Level 1		WI-LOG-001	Rev. : 05



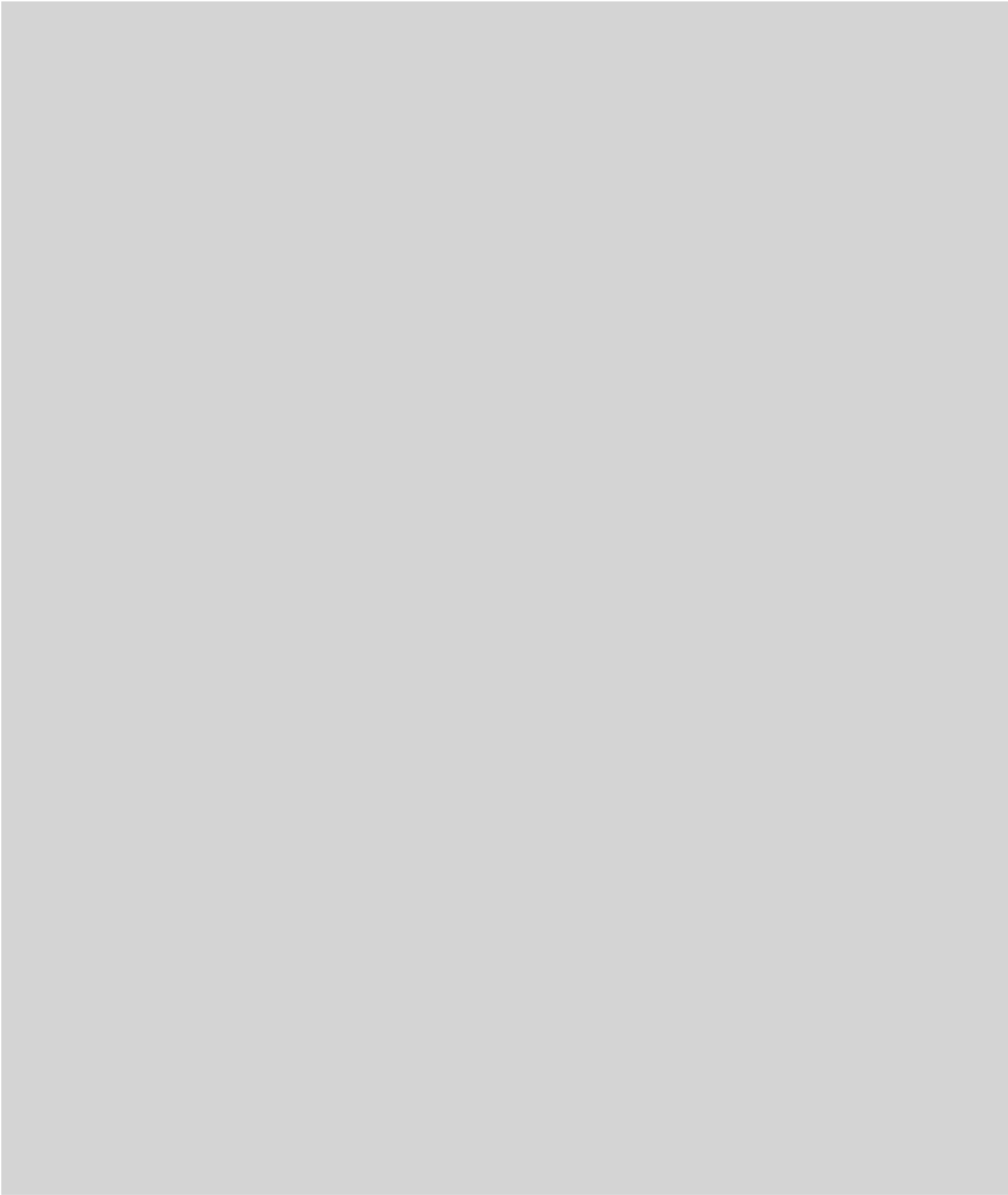
posco TCS	Work Instruction	Work Outline	Enforcement Date : 2024/08/01	Page:47/60
	Level 1		WI-LOG-001	Rev. : 05



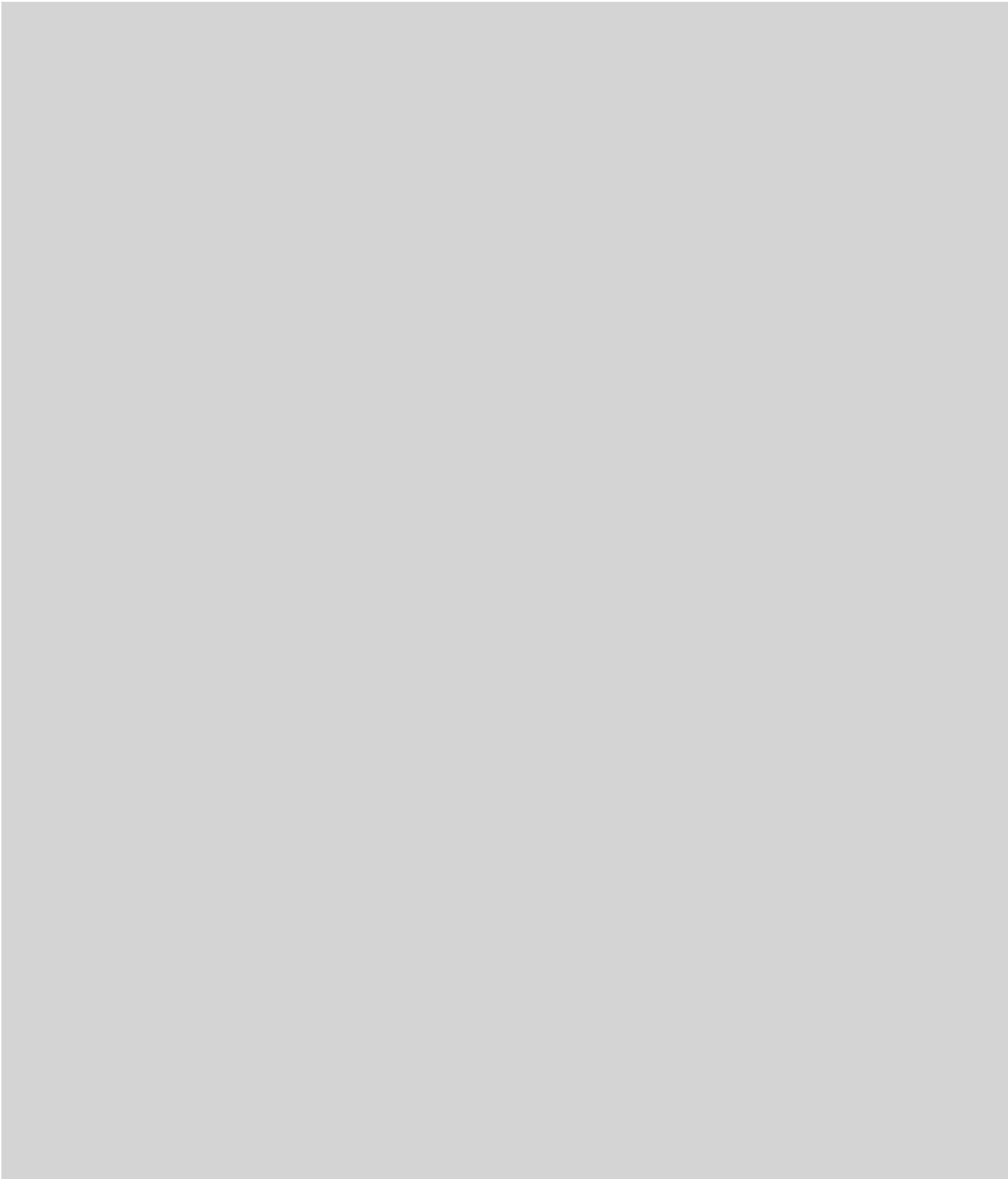
posco TCS	Work Instruction	Work Outline	Enforcement Date : 2024/08/01	Page:48/60
	Level 1		WI-LOG-001	Rev. : 05



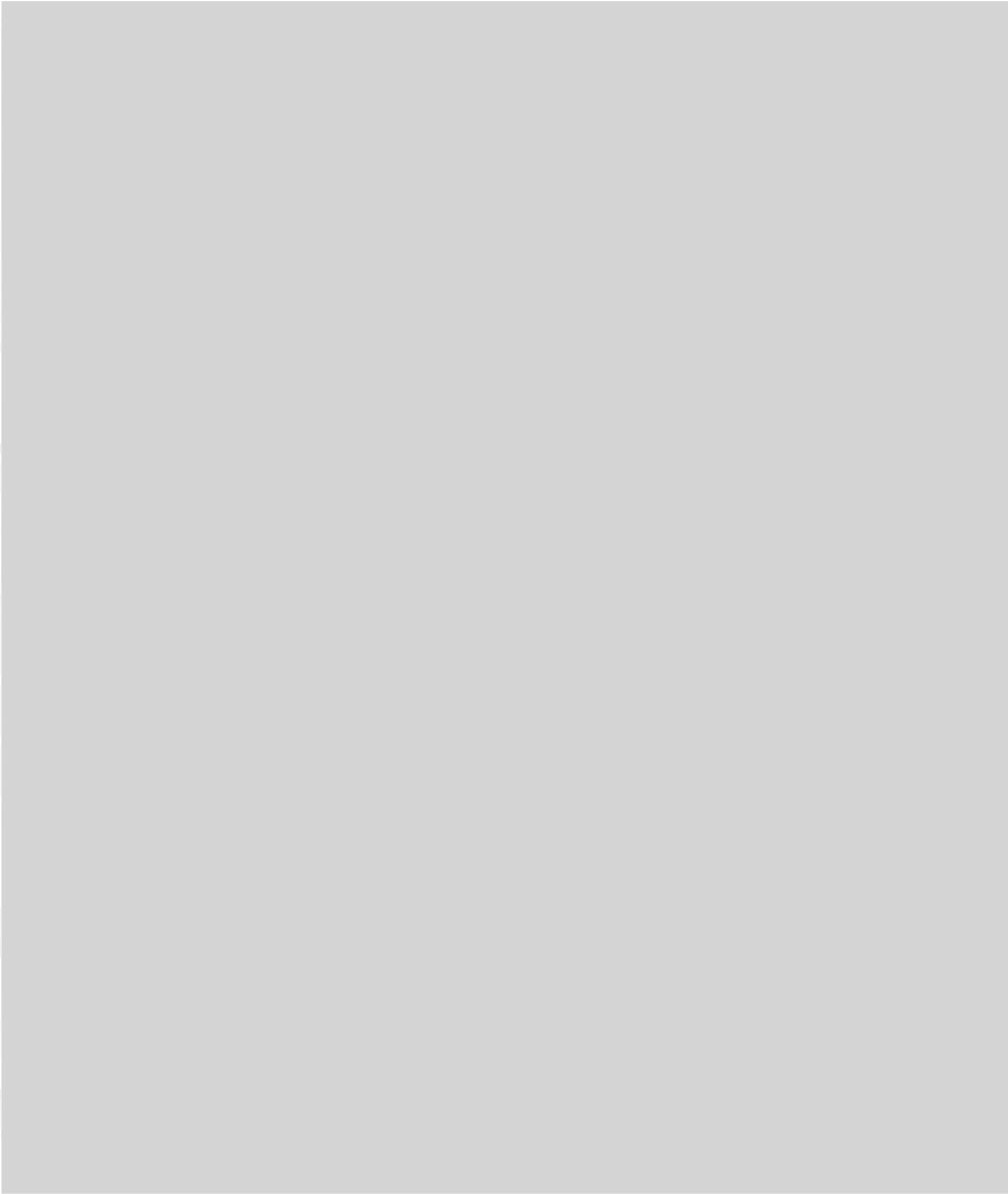
posco TCS	Work Instruction	Work Outline	Enforcement Date : 2024/08/01	Page:49/60
	Level 1 Logistics Delivery		WI-LOG-001	Rev. : 05



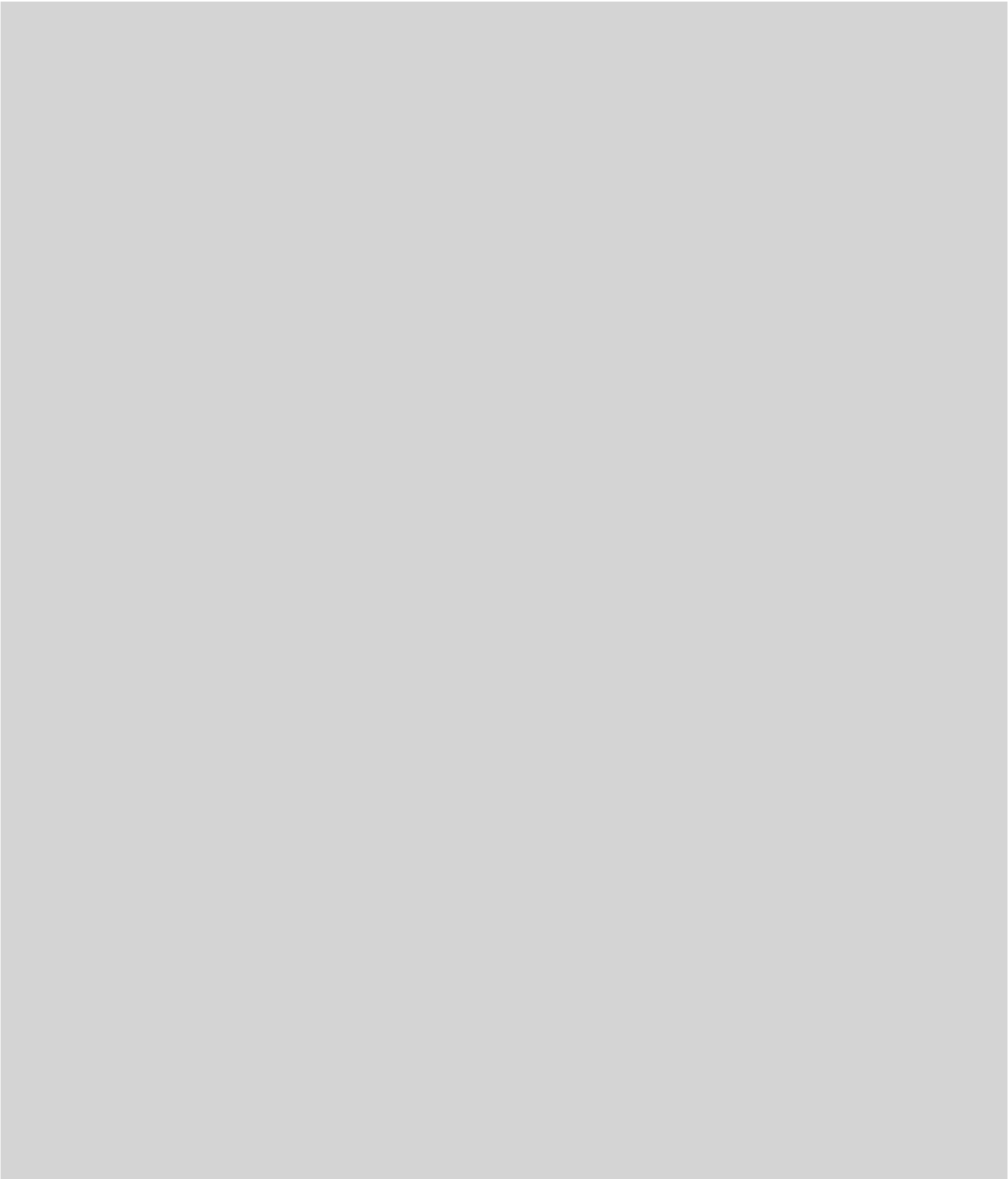
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	Level 1 Logistics Delivery		WI-LOG-001	Rev. : 05



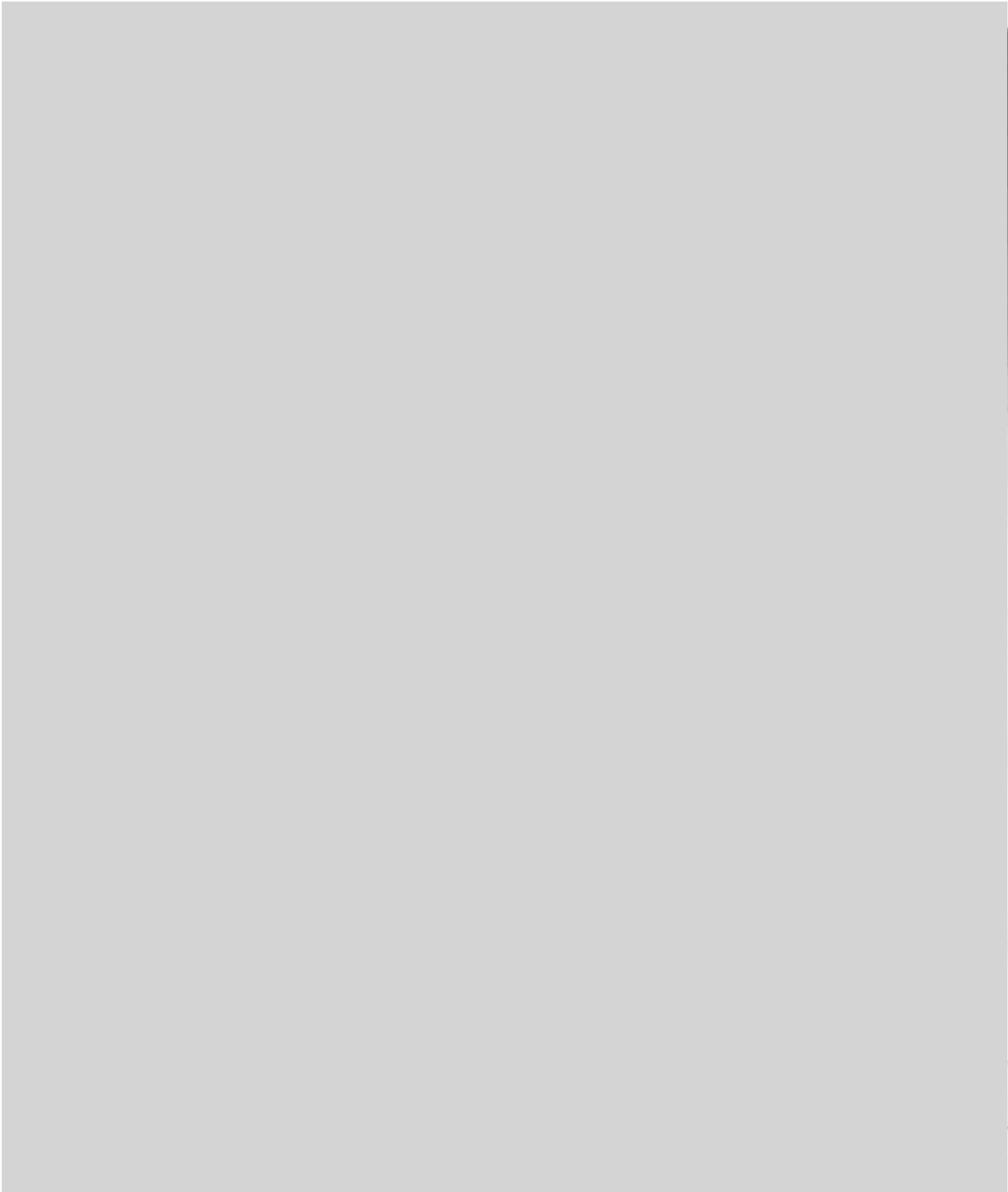
posco TCS	Work Instruction	Work Outline	Enforcement Date : 2024/08/01	Page:51/60
	Level 1		WI-LOG-001	Rev. : 05



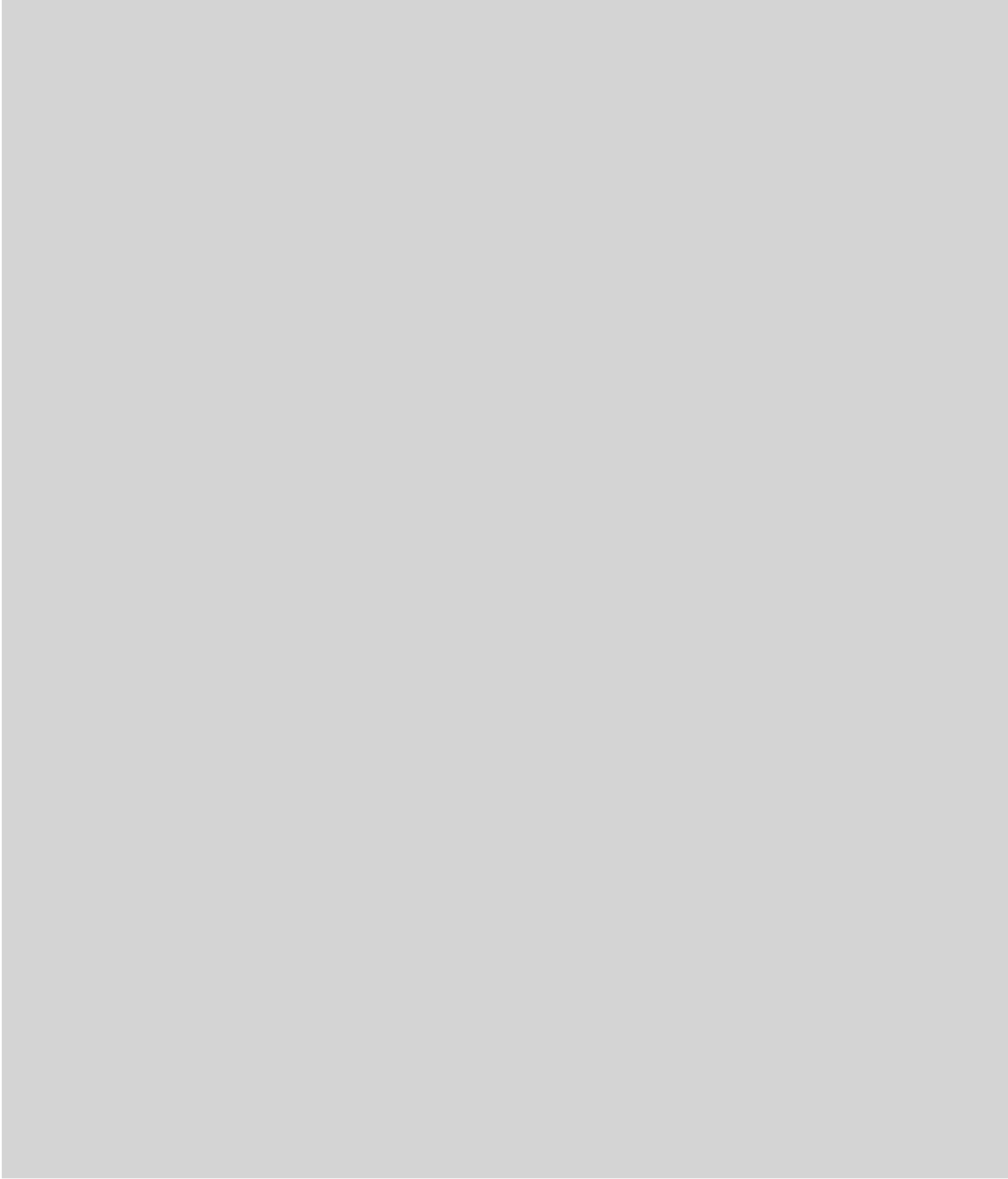
posco TCS	Work Instruction	Work Outline	Enforcement Date : 2024/08/01	Page:52/60
	Level 1		WI-LOG-001	Rev. : 05



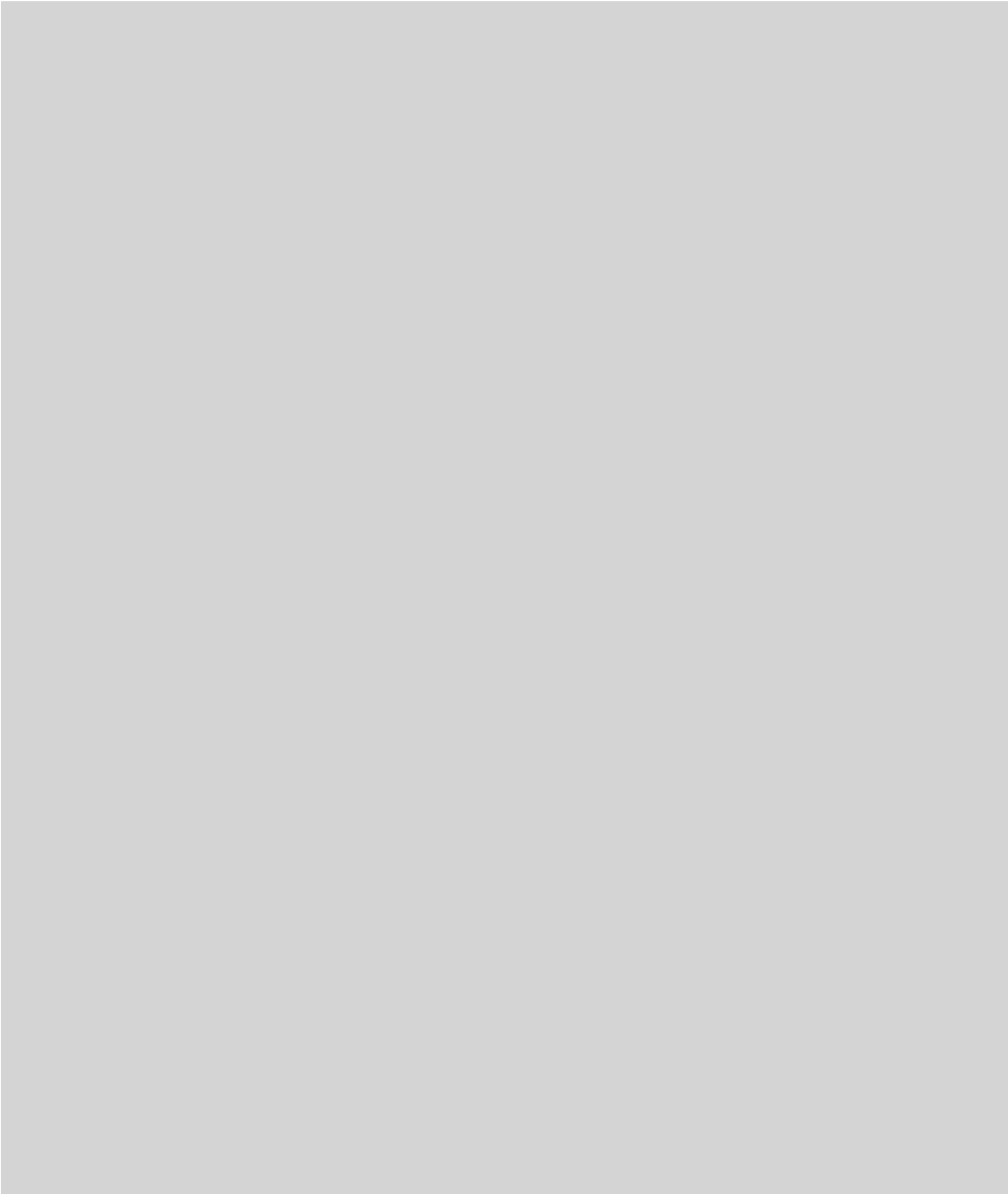
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	Level 1		Logistics Delivery	WI-LOG-001



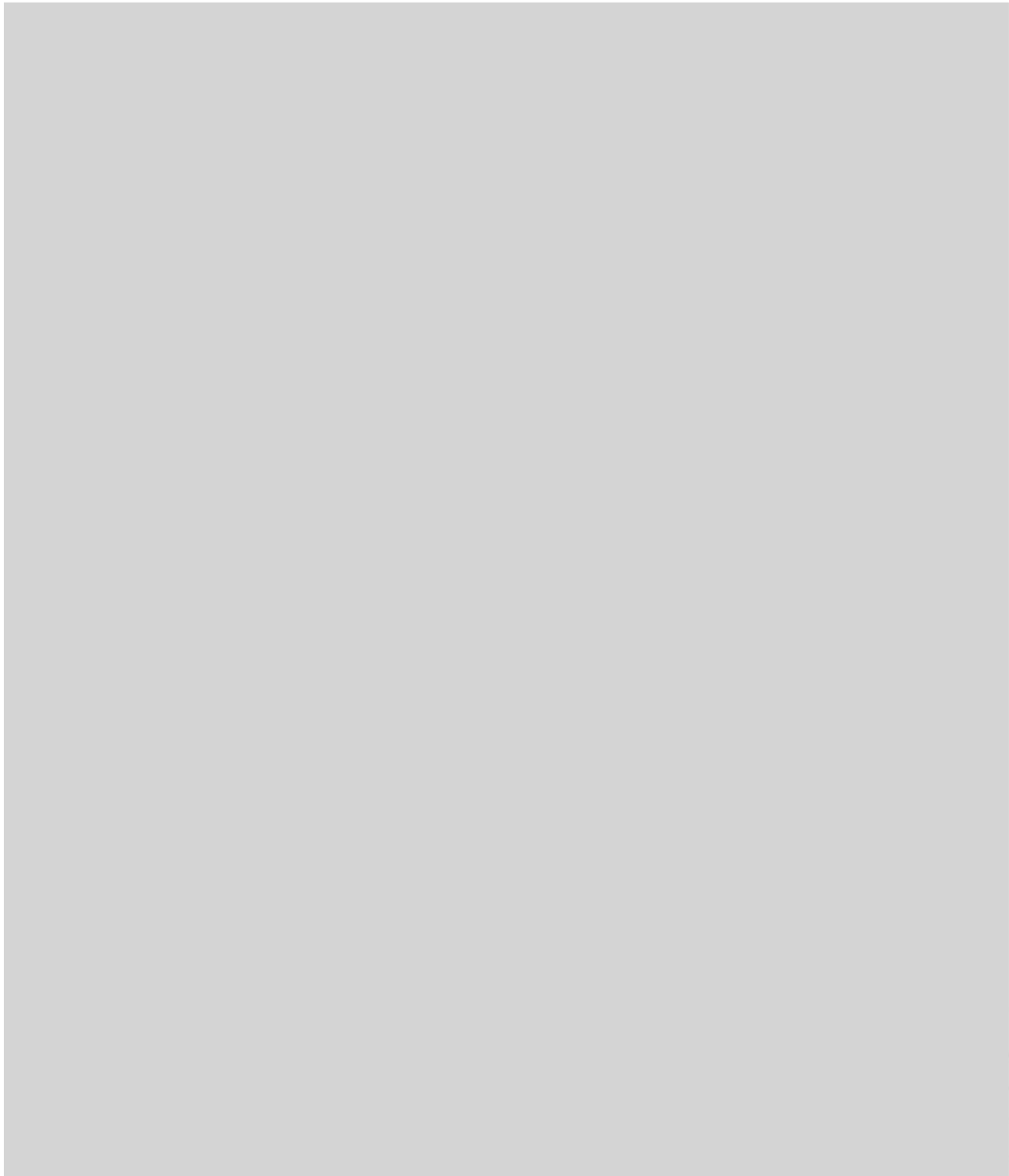
posco TCS	Work Instruction	Work Outline	Enforcement Date : 2024/08/01	Page:54/60
	Level 1		Logistics Delivery	WI-LOG-001



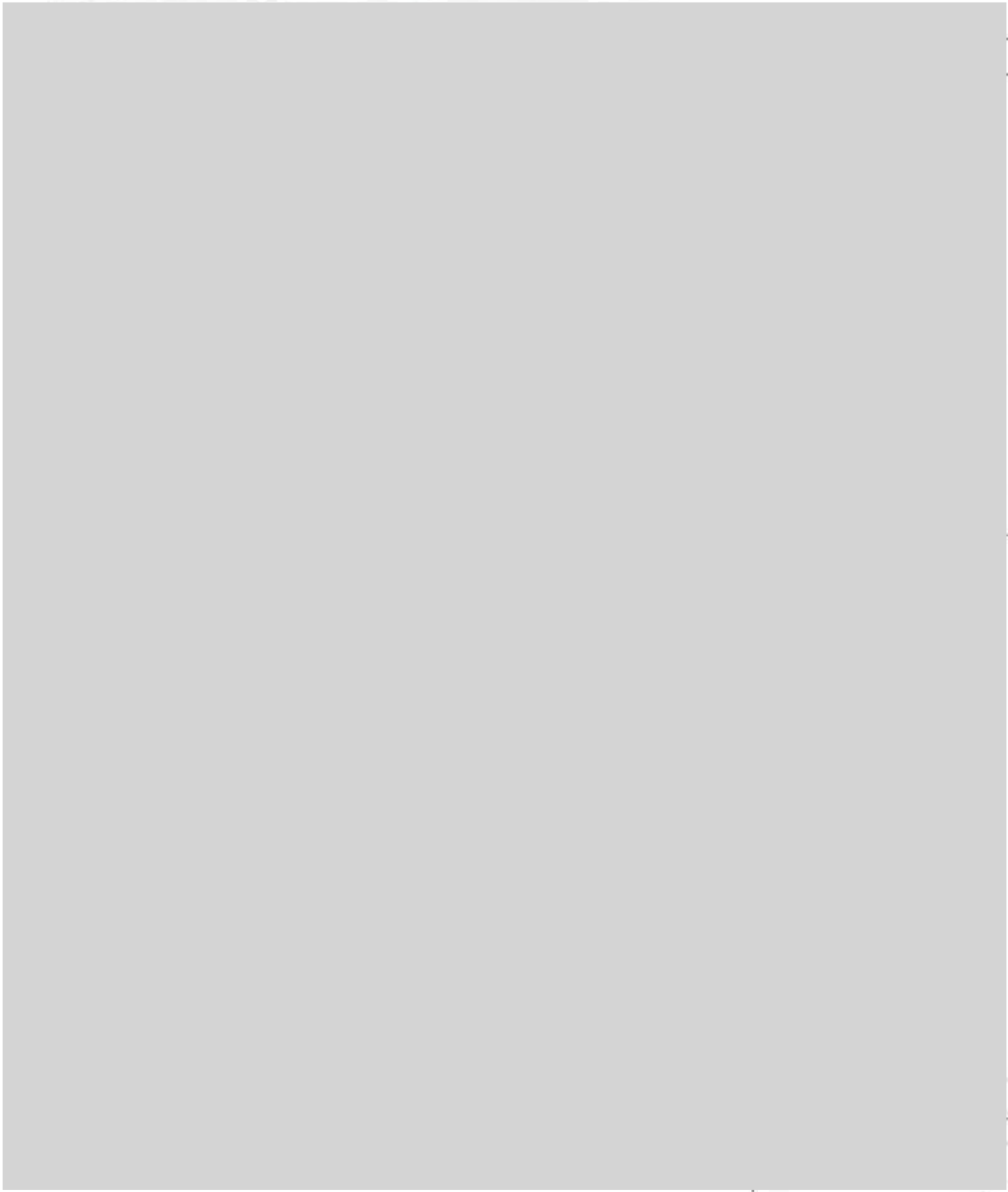
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	Level 1		WI-LOG-001	Rev. : 05



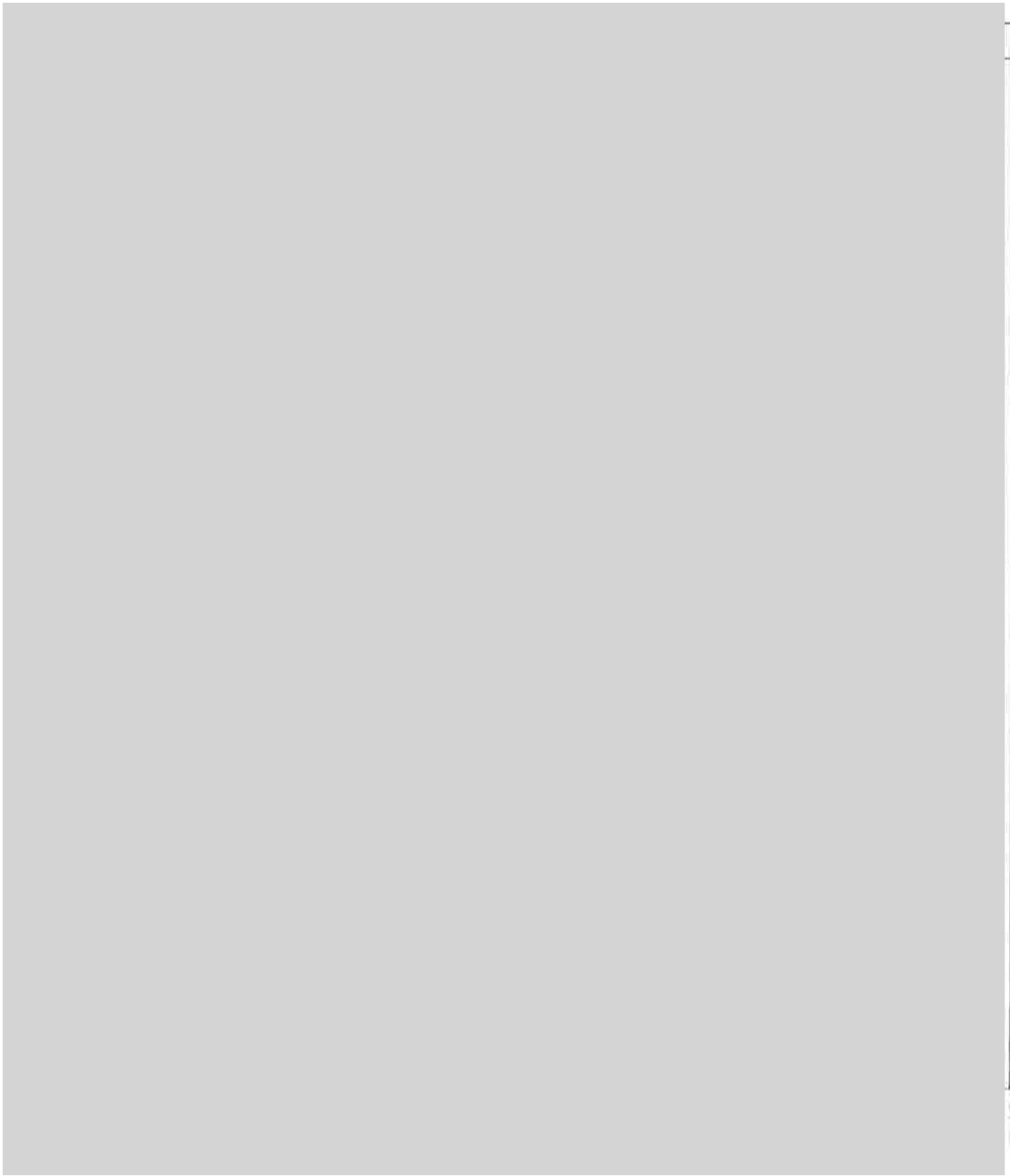
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	Level 1		WI-LOG-001	Rev. : 05



posco TCS	Work Instruction	Work Outline	Enforcement Date : 2024/08/01	Page:57/60
	Level 1 Logistics Delivery		WI-LOG-001	Rev. : 05



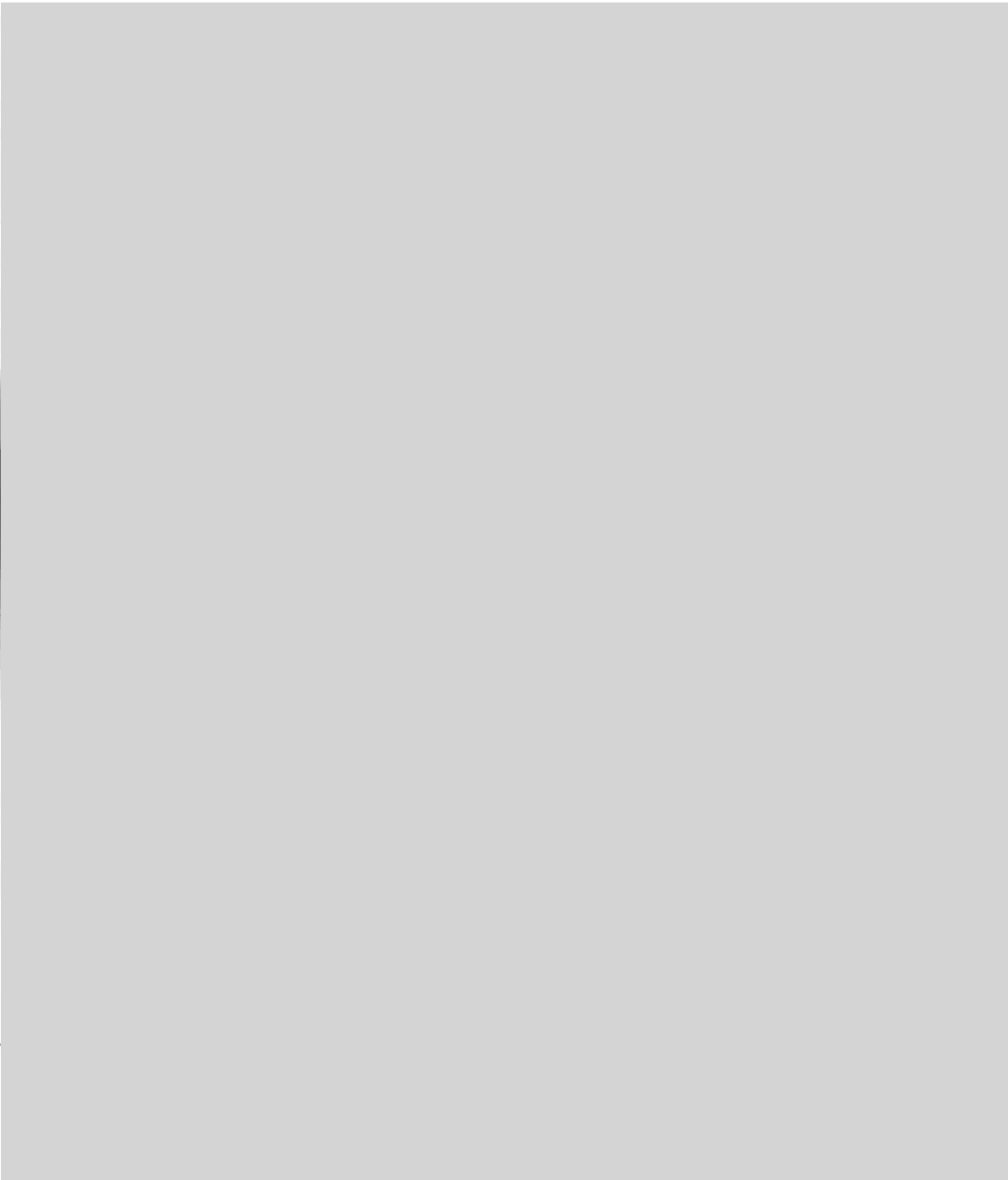
posco TCS	Work Instruction	Work Outline	Enforcement Date : 2024/08/01	Page:58/60
	Level 1 Logistics Delivery		WI-LOG-001	Rev. : 05



posco TCS	Work Instruction	Work Outline	Enforcement Date :	Page:59/60
	Level 1		2024/08/01 WI-LOG-001	Rev. : 05
Logistics Delivery				



posco TCS	Work Instruction	Work Outline	Enforcement Date :	Page:60/60
	Level 1		2024/08/01 WI-LOG-001	Rev. : 05
Logistics Delivery				



ภาคผนวก ข.2-14

เอกสารการอบรมผู้รับเหมาขนส่ง

ข้อกำหนดด้านความปลอดภัย ในการขนส่งสินค้า

posco



01



จำกัดความเร็วภายในโรงงาน
ชั้นไม่เกิน 30 กม./ชม.

02



ไม่ขับรถย้อนศร
หรือ ข้ามเส้นกึ่งกลาง



03



หยุดรถ
บริเวณทางข้าม ทางแยก



04



Stopper จะต้องมีการร้อย
คล้องกับมือจับประตูลูก



บทลงโทษเมื่อฝ่าฝืนข้อกำหนดด้านความปลอดภัย



ข้อกำหนดด้านความปลอดภัย	บทลงโทษ		
	ครั้งที่ 1	ครั้งที่ 2	ครั้งที่ 3
1. ความเร็ว 30 กม./ชม.	ตักเตือน	ห้ามวิ่งงาน 15 วัน	ห้ามวิ่งงาน 90 วัน
2. ขับรถย้อนศรหรือข้ามเส้นกึ่งกลาง	ตักเตือน	ห้ามวิ่งงาน 15 วัน	ห้ามวิ่งงาน 90 วัน
3. จุดหยุด	ตักเตือน	ห้ามวิ่งงาน 15 วัน	ห้ามวิ่งงาน 90 วัน
4. การใช้ Stopper	ตักเตือน	ห้ามวิ่งงาน 15 วัน	ห้ามวิ่งงาน 90 วัน
5. อุปกรณ์ความปลอดภัยส่วนบุคคลและอุปกรณ์บรรทุก	ตักเตือน + โฉนดขาดใบ ในรถสินค้าจัดส่ง	ห้ามวิ่งงาน 30 วัน	ห้ามวิ่งงาน 90 วัน
6. เมารถกะบังและการใช้สารเสพติด	ห้ามไม่ให้วิ่งงานให้พ้นจาก P-TCS อีกต่อไป		
7. อุบัติเหตุจากการขนส่ง	พิจารณาตามแต่กรณี (โทษสูงสุด : ห้ามไม่ให้วิ่งงานให้พ้นทางบริษัท POSCO-TCS อีกต่อไป)		

With POSCO

การป้องกันการเกิดอุบัติเหตุในการขนส่ง

posco



ปฏิบัติตามกฎการจำกัดความเร็วอย่างเคร่งครัด

ขับไม่เกิน 60 กม./ชม.

และใช้ความเร็วขณะเข้าโค้งไม่เกิน 20 กม./ชม.

ความเร็ว คือ สาเหตุหลักอย่างหนึ่งของการเกิดอุบัติเหตุ



สามแยกทางเข้าบริษัท คือ จุดเสี่ยงสูงในการเกิดอุบัติเหตุ

กรุณาใช้ความระมัดระวังในการขับและปฏิบัติตามข้อกำหนด ดังนี้

1. หยุดรถ เมื่อถึงทางแยก
2. ชะลอรถ ไม่ใช้ความเร็วขณะเข้าโค้ง (ไม่เกิน 20 กม./ชม.)

* รวมถึงทางแยก จุดกลับรถ อื่นๆ ก็ต้องใช้ความระมัดระวังสูงเช่นกัน

ขั้นตอนการส่งสินค้า

Material Yard

With POSCO

posco



1 จอดรอด้านนอก

(ห้ามปลดโซลิตก่อนเข้าโรง ในกรณีนี้ฝนตก ต้องเปิดผ้าใบด้านในโรงงานเท่านั้น)

2 เข้าโรงงานเมื่อเจ้าหน้าที่เรียกรถเท่านั้น

3 จอดรถในช่องจอด และดับเครื่องยนต์

4 ลงจากรถวาง Stopper ให้เรียบร้อย

5 ขึ้นทำอรรถเทรลเลอร์โดยบันไดเซฟตี้ และปลดโซลิต

6 รอและดูการยกสินค้าลงจากรถจนเสร็จสิ้น

7 เก็บ Stopper และรับรถออกจากบริเวณโรงงาน





ห้ามจอดหน้าไนโตรเจน



ห้ามจอดหน้าประตู C2 ช่วงเย็นเลิกงาน
ให้จอดรอตั้งแต่ตาช้างเป็นต้นไป



ช่องจอดรถ HOLD
สำหรับจอดรอเวลาสินค้าติดปัญหา



With POSCO



โปรดช่วยกันรักษาความสะอาด
บริเวณพื้นที่ในโรงงานด้วยนะคะ ^^
posco

