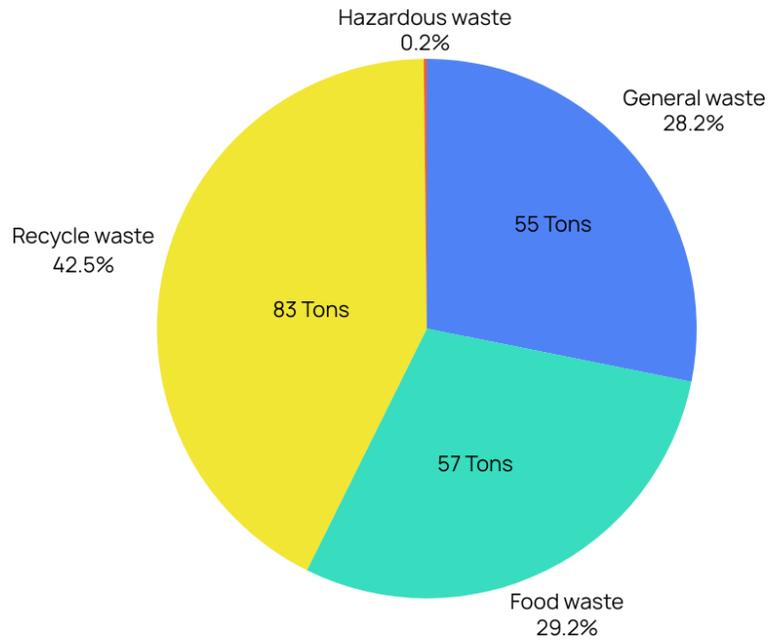


Pollution and Resources Management

2025 Performance

Waste data



Total waste volume 196 ตัน	Waste to landfill reduction 57.43%
GHG emission reduction 82.61 tCO₂e	

Air pollution emissions data

Parameter	Unit	Result	Standard	Analytic Method	Standard compare
TSP	Mg/m ³	118.46	240	U.S.EPA Method 5	✓
Carbon monoxide	ppm	488.00	690	Instrumental Analyzer Method	✓
Sulfur dioxide	ppm	17.00	950	Instrumental Analyzer Method	✓
Oxide of nitrogen as Nitrogen dioxide	ppm	0.20	200	Instrumental Analyzer Method	✓
Opacity	%	8.66	10	Ringelmann's Method	✓

*Air quality measurements from the asphalt concrete plant stack, Ayutthaya Province

Water usage data*

Water consumption 6,732 ลิตร	2023 baseline 10,622 ลิตร
2025 water reduction target 2%	Actual water reduction 3,890 ลิตร (คิดเป็น 37%)

*Water consumption data from headquarters activities only

Building Wastewater Quality*

Parameter	Result	Building type c standard	Standard compare
pH	7.67	5.5 - 9.0	✓
Total Dissolved Solids	586.67	≤1300	✓
Totals Suspended Solids	18.67	≤50	✓
BOD	19.67	≤40	✓
Sulfide	<1.0	≤1.0	✓
Total Kjeldahl Nitrogen	23.33	≤40	✓
Oil and grease	<5	≤20	✓

*Wastewater quality data from headquarters activities only

Green procurement

Green procurement (Comparing to total procurement value) 0.0001%	Total green procurement value 448,170.55 บาท
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Waste Segregation Program

The Company has implemented a systematic waste management policy across the entire organization, requiring all employees to participate in proper waste segregation at source. Waste segregation points have been established in all operational areas, including headquarters, construction sites, and support facilities such as machinery service centers and asphalt concrete plants. Waste is categorized into recyclable waste, food waste, general waste, and hazardous waste. The communication and education programs are provided to employees regarding proper segregation methods and the benefits of effective waste management.

Beyond internal operations, the Company has extended waste management practices throughout the value chain by requiring contractors and subcontractors to implement proper waste management systems at project sites. Regular monitoring and guidance are provided to ensure waste management across all areas is effective and aligned with Company standards.

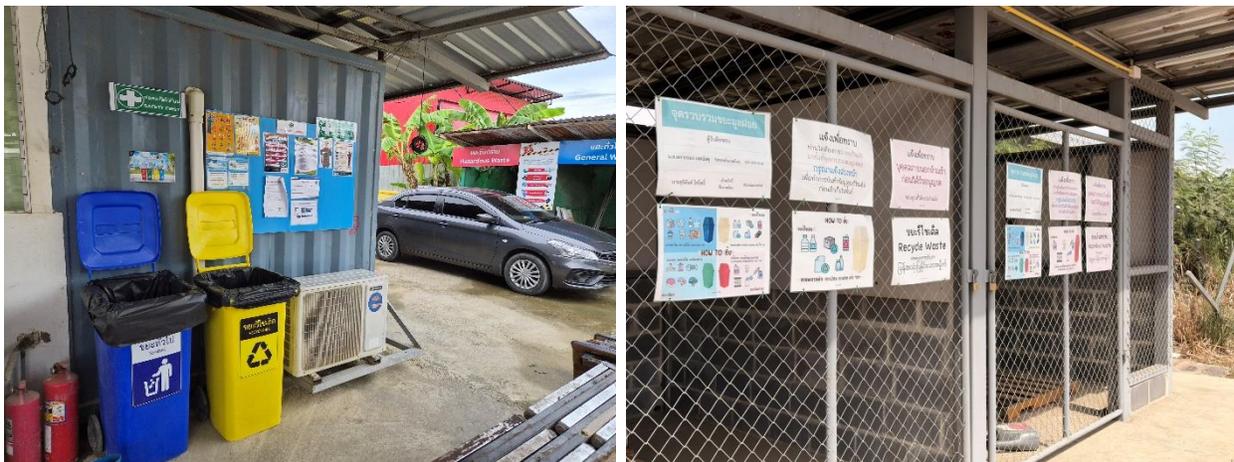
In 2025, the Company expanded its waste data collection and reporting scope from headquarters only to all construction sites and support facilities nationwide. This comprehensive data collection enables the Company to clearly understand waste generation across all operational processes and serves as baseline data for setting concrete waste reduction and management targets in subsequent years.

In 2025, the Company recorded total waste generation of 196 tons. Through systematic waste segregation and management, 113 tons (57.43%) was successfully diverted from landfill disposal, with recyclable waste forwarded to licensed recycle company, while organic waste

was processed into compost for the Company's on-site vegetable garden or transferred to local agencies for use as animal feed and organic fertilizer.

In addition to reducing waste to landfill, proper waste segregation and management helped reduce greenhouse gas emissions by 82.61 tCO₂e, resulting from reduced methane production from waste decomposition in landfills and reduced energy consumption in producing new raw materials through recycling.

The Company plans to further enhance waste management efficiency in the future by setting targets to increase the proportion of waste recovered for beneficial use, reduce waste generation at source, and develop innovations for creating added value from waste, moving toward becoming an organization that truly manages resources according to circular economy principles.



Waste segregation spots at various construction sites



Waste segregation activity communication through internal Newsletter

Food Waste Composting Project

The Company has developed a comprehensive food waste management system at headquarters by applying circular economy principles to manage waste from the Company cafeteria. The process begins with strict separation of food waste from other waste types, which is then processed into compost using a Food Waste Composter installed in Company area.

The organic compost produced is used in the Company's organic vegetable garden, which is part of a program promoting food security and employee well-being. Organic vegetables grown using the compost from employees' food waste are used to prepare lunch in the Company cafeteria. This provides employees with knowledge about organic gardening and food waste management, creating sustainability awareness that can be applied in daily life.

Result:

The Food Waste Composter can process an average of 4 kilograms of food waste per day, or approximately 1,040 kilograms per year, representing 17% of total food waste generated at headquarters.

This program reduces food waste sent to landfill, decreases costs for purchasing fertilizers and fresh vegetables externally, promotes food security within the organization, and inspires employees to recognize the value of efficient resource management.



Food waste composting activities

Surplus Concrete Planter Project

The Company emphasizes efficient resource management throughout the project lifecycle, from design stages considering appropriate and cost-effective material use, procurement with accurate quantity planning and estimation, to construction process control minimizing waste and loss. However, in practice, construction operations may generate small amounts of surplus concrete or materials from various factors such as field design modifications,

material orders requiring standard construction allowances, or excess concrete from floor or structure pours that cannot be returned to the production process.

To prevent these surplus materials from becoming waste, the Company developed a program to transform surplus concrete into new products. The team designed and produced planters from surplus concrete for use in planting ornamental plants and vegetables to decorate and improve landscapes in Company areas, creating a nature-friendly and pleasant working environment for employees. Additionally, these planters are used for landscaping at entrances and common areas, increasing green spaces and promoting biodiversity in project areas.

This program reflects the circular economy concept the Company applies in operations by transforming waste into valuable resources, reducing construction waste for disposal, reducing use of new materials for external planter purchases, and creating added value from surplus materials. At the same time, the program encourages employees to recognize the importance of efficient resource use and participate in developing methods to repurpose surplus materials in various ways. The Company plans to extend this concept to transform other types of surplus materials into useful products, moving toward sustainable and environmentally friendly waste management goals.



Production of planters from surplus concrete

Environmental Impact Reduction in Asphalt Concrete Production

The Company has implemented air pollution control system improvements at the asphalt concrete plant in Ayutthaya Province to continuously reduce environmental and community impacts, recognizing that construction operations and construction material production play a significant role in air quality in operational areas and nearby communities.

The plant originally installed multiple levels of air quality control systems, including a Bag Filter system at the stack, dust barriers around the plant perimeter, water spraying in operational areas and transportation routes, and proper material stockpile management. These systems work together effectively, reflected in 2024 stack air quality measurements by certified inspectors, which found all pollutant parameters met Department of Industrial Works standards.

However, the Company is committed to elevating air quality management standards beyond minimum legal requirements, recognizing its responsibility to the community and its role in addressing air quality issues, particularly fine particulate matter ($PM_{2.5}$), which is a significant national concern affecting public health in many areas.

In 2025, the Company invested over THB 900,000 to install an additional Wet Scrubber system to enhance efficiency in capturing and significantly reducing Total Suspended Particulates (TSP) from the production process. The Wet Scrubber technology works by spraying water through the air stream released from the stack, causing particulates to attach to water droplets and settle, which is more effective than single-stage dust filtration, especially for smaller particles that have greater health impacts.

This investment creates a Multi-Stage Air Quality Control System working from dust generation points to the stack, ensuring the best possible care for air quality impacts on surrounding communities. Additionally, the Company plans to continuously monitor and evaluate the new system's performance, including annual air quality measurements to confirm effectiveness and compliance with standards.


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Page 1 of 1

ANALYSIS REPORT

Customer Name : บริษัท ซีวีเอ็นจีเนียร์ จำกัด (มหาชน)
Address : เลขที่ 78 หมู่ 5 ตำบลหันสัง อำเภอบางปะหัน จังหวัดพระนครศรีอยุธยา 13220
Sampling Type : Emission Air Quality (Stack) **Result report No.** : R005
Sampling Location : Asphaltic Chimney **Report Date** : March 25, 2024
Measuring instrument : isokinetic Source Sampling System **Received Date** : March 13, 2024
 Brand Apex, model XD-502-V, Number 1901001 **Analytical Date** : March 14-23, 2024
 : Combustion efficiency analyzer **Sampling Date** : March 13, 2024
 Brand Bacharach Model PCA400 Machine Number 21013905
Sampling By : Mr.Watchara Khanthakham ๖-353-๑-0001

Parameter	Unit	Result	Standard ⁽¹⁾	Analytical Method	Standard Compare
Sampling time	-	10.40 – 11.30	-	-	-
Sampling point	-	47 P 662616 UTM 1605098	-	-	-
Stack Height	m	5.25	-	-	-
Stack Diameter	m	0.88	-	-	-
Fuel Type	-	Fuel Oil	-	-	-
Air pollution treatment system	-	Bag Filter	-	-	-
Typical atmospheric air temperature	oC	33.0	-	-	-
Stack Temperature	oC	53.0	-	-	-
Absolute Stack Pressure	mm. Hg	757.0	-	-	-
Moisture	%	5.81	-	U.S.EPA Method 4	-
Carbon dioxide (CO ₂)	%	0.9	-	U.S.EPA Method 3	-
Oxygen (O ₂)	%	20.0	-	U.S.EPA Method 3	-
Air Velocity	m/s	10.49	-	U.S.EPA Method 2	-
Actual Volumetric Flow Rate (Wet Basis)	m ³ /hr	22,964.198	-	U.S.EPA Method 2	-
Percentage of isokinetic storage	%	101.12	-	-	-
Total Suspended Particulate	mg/m ³	118.460 ⁽²⁾	240	U.S.EPA Method 5	✓
Carbon monoxide	ppm	488.00 ⁽²⁾	690	Instrumental Analyzer Method	✓
Sulfur dioxide	ppm	17.00 ⁽²⁾	950	Instrumental Analyzer Method	✓
Oxides of nitrogen as Nitrogen dioxide	ppm	0.20 ⁽²⁾	200	Instrumental Analyzer Method	✓
Opacity	%	8.66	10	Ringelmann's Method	✓

Sources: (1) Notification of the Ministry of Industry B.E.2549 (2006), issued under Factory Act B.E.2535 (1992) dated October 31, B.E.2549 (2006), which was published in the Royal Government Gazette, Vol.123, Special part 125D dated December 4, B.E.2549 (2006)

Remarks: (2) Concentrations at the reference conditions of 1 atm or 760 mmHg, temperature of 25 °C, dry basis

(3) The monitoring results of air emissions from a production process with fuel combustion in close system are reported as concentrations at the reference conditions of 1 atm or 760 mmHg, temperature of 25 °C, dry basis and excess air of 50% or excess O₂ of 7%



(Mrs.Prapaporn Pukasemvarangkool)
Laboratory Supervisor
๖-206-๙-6226




(Dr.Sookphaporn Pukasemvarangkool)
Managing Director

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F-7,8-02-001-01-63

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Environmental improvements at asphalt concrete plant comparing (Top) 2023 and (Bottom) 2025

Automatic Grease Separator Innovation Project

The Company emphasizes systematic wastewater management from machinery and vehicle maintenance processes, particularly wastewater contaminated with oil and grease, which is the main water pollutant from such activities. All Company machinery service centers have preliminary wastewater treatment systems through sedimentation processes to allow separation by density between water and oil, with employees responsible for daily collection of oil floating on the water surface before transferring to licensed hazardous waste handlers for proper disposal. Treated water is discharged to the Company's internal water sources for reuse in various activities, such as washing operational areas and use in water trucks for dust suppression at project sites, as part of efficient water resource management.

In 2025, the Company provided opportunities for employees at all levels to participate in proposing ideas and implementing process improvements to enhance efficiency and reduce environmental impacts. The employee team from the Machinery Service Center in Saraburi Province proposed developing an automatic grease separator to address problems with traditional manual oil collection methods, which had several limitations including inability to collect oil from the entire pond area due to access constraints, high time requirements for operations, and increased health risks to employees from direct contact with hazardous chemicals.

The team studied, analyzed, and designed a grease separator appropriate for the service center's operational context, then assembled it using the mechanical skills and engineering knowledge of the employees themselves. The developed grease separator can continuously capture and separate oil across the entire pond area, with a capacity of up to 50 liters per day.

- Health and Safety: Reduced working time in contact with hazardous chemicals from oil by over 2 hours per day, reducing risks of short and long-term health problems such as skin irritation, respiratory system issues, and effects from chemical accumulation in the body.
- Economic Benefits: Saved 36% on costs of purchasing ready-made grease separation equipment from external sources by using employees' knowledge and skills to create innovations that meet actual operational needs, and increased efficiency of employee working time to focus on higher value-added work.
- Personnel Development and Organizational Culture: Motivated employees at all levels to participate in developing and improving work processes, enhanced analytical thinking, creative problem-solving, and teamwork skills, and promoted an organizational culture that welcomes input and values innovation from all levels.

This project is a clear example of integrating environmental management goals with personnel capability development, demonstrating that true sustainability comes from the creativity and participation of people within the organization. The Company plans to expand use of this grease separator design to other machinery service centers and promote employee innovation projects in other areas.



Automatic grease separator



(Left) Treatment pond before automatic grease separator installation (Right) Treatment pond after installation, showing significantly reduced oil layer