



CR-Enviro Newsletter

Vol 9.0

ENGINEERING SOLUTIONS FOR OUR ENVIRONMENT, INDUSTRY AND COMMUNITY

NEWSLETTER, JULY 2018



Forming the Indonesian Professional Incinerator and Waste Water Treatment Plant Manufacturer Association.

During last second quarter of 2018, CR-Enviro have involved extensively in the forming of two related association which is the Indonesian Professional Incinerator and Waste Water Treatment Plant Manufacturer Association. Both association have managed to be formed and registered under the governing law of Indonesia and is fully supported by related government ministry such as Ministry of Forestry and Environment, Ministry of Health, LKPP, etc.

The first association being formed is the Indonesian Incinerator Manufacturer Association which was called as Perkumpulan Produsen Insinerator Indonesia (PPI Indonesia) which was formed on 4th of April 2018 and have fully agreed to choose Mr. Rudy Indra Wardhana of PT. Hasakona - Bandung as chairman of the association.

The second association formed is the Indonesian Waste Water Treatment Plant Manufacturer Association which was called as Ikatan Produsen IPAL Indonesia (IPAL Indonesia) which was formed on 7th May 2018 and have fully agreed to choose Mr. A.A. Ngurah Panji of PT. Amanaid - Bali as chairman of the association.

Both association is now undergoes legal registration and coordination between the member and the organizer to consolidate it's vision and mission in order to reach the milestone of success to be part of the partner with all stake holder in creating a better support for the government and customer in the future for all related incinerator and wast water treatment plant product which mostly made in Indonesia.

CR-Enviro is honoured to be a part of the founder and organizer for both association and will contribute our best to the development of the association and we wish all the best to all founder, organizer and member of PPI Indonesia and IPAL Indonesia Association in the future.

Board of Directors of PT. CRE



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CR-Enviro Undergoes Two ISO 2015 Certifications.



As a part of our commitment in delivering better product quality and in-line with our long term 3P Framework (People, Profit and Planet) to create a better Planet, CR-Enviro is currently undergoing two ISO certification which is 9001:2015 and 14001:2015 together with the help of TUV Nord of Germany as the certification body.

The two ISO certification will be scheduled to be done by as early as December 2018 and we are currently under internal audit process to achieve this certification. The commitment has been established by top management of CR-Enviro and fully supported by internal ISO team which have work day and night to assure the certification process achieve the target.

We would welcome any critics, complain, feedback and improvement to our organization to create a better customer satisfaction. Please kindly fill out our online customer feedback form at <https://crenviro.erpnext.com/customer-feedback-form>



Inset Photo: Team CRE and ISO Trainer from TUV Nord



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CR-Enviro Working with Multiple International Partners.

To continue the current expansion and development of the company, the Board of Director of CR-Enviro have started a new trading division under its sales and marketing division to support the current project-based revenue sector. The trading division will have equipped with related product and services that is required by the market.

"Our trading division is developed due to the fact that we are having a lot of inquiries from our customer and from other lead sources both online and offline. The division will be focused to achieve short, medium and long-term goals and target to support the company effort to achieve its milestone this year and we hope that this will bring another fortune for the company growth in the future" said Mr. Dimas Lesmana – Managing Director of CR-Enviro.

Below is several product and services from our international principal:

-  Pipe Wrap Milliken Infrastructure of USA - the world's leading manufacturer of permanent and temporary composite pipe repair solutions. Together with Pipe Wrap USA, CR-Enviro is appointed as distributor to handle the Indonesian market to provide innovative solutions for permanent and temporary composite pipe repair solutions. Website: <http://cr-enviro.com/our-product/pipeline-integrity/composite-repair/>
-  Olympia Kogyo of Japan - Olympia Kogyo Co.,Ltd. is a pioneer manufacturer of Burner in Japan. Achievement of Japanese No.1 sales result for Gas Burner. Oil Burner is produced over 400,000 units as accumulation of sales result. CR-Enviro is currently appointed as distributor of the product for Indonesia area including its aftermarket services. Website: <http://cr-enviro.com/our-product/burner/>
-  Ray Agua of Spain – Ray Agua developed a new technology that transforms the atmospheric humidity to drinking water by its AQUAIR units with reduced power consumption and low maintenance cost. RAY AGUA provides custom made water source with unlimited capacity of drinking water generation, thanks to the modularity of its universal units. RAY AGUA designs and manufactures two modular formats: AQ250 able to produce up to 260 liters at day and AQ5000 able to generate 8,400 liters of drinking water per day. CR-Enviro is currently appointed as distributor of the product for Indonesia area including its aftermarket services. Website: <http://cr-enviro.com/our-product/water-maker/>
-  Multisensor Systems Ltd of United Kingdom (UK) - Multisensor Systems is a developer and supplier of Environmental, Water and Air Monitoring instruments based in the United Kingdom. Our products are designed and built to the highest quality standards. CR-Enviro is currently appointed as distributor of the product for Indonesia area including its aftermarket services. Website: <http://cr-enviro.com/our-product/online-monitoring-system/>
-  ERPNext of India – ERPNext is an ERP Software that helps you take full control of your business. ERPNext is both powerful and easy to use. CR-Enviro provide installation, implementation, customization and consulting for ERPNext in Indonesia. Website: <http://cr-enviro.com/our-services/erp-management-system/>

For all related product and services inquiries, simply send an email to marketing@cr-enviro.com and our sales and marketing team will be communicating with you directly.



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DLH Depok and Industry Counterparts Doing Field Study of Medical and Hazardous Waste Incinerator.

On 26th of April one of our customer PT. Andhika Makmur Persada (PT. AMP) located in Gunung Putri – Bogor which have managed to successfully install a 600 kg/hours medical and hazardous waste incinerator have been officially visited by the Depok – Ministry of Environment official (DLH Depok) which also brings more than 50 people from industrial counterparts from related industry to conduct a field study on the hazardous and medical waste incinerator which is produced by CR-Enviro.

One of the DLH Depok Official – Mr. Indra said that the visit was being made to PT. AMP since PT. AMP is the closest company in Bogor-Depok area which have manage to install medical and hazardous waste incinerator and we are informing our industrial counterpart to study the company and technology which is suitable to handle their problem within hazardous and medical waste treatment. We hope that they can have better alternative to handle their current issue with medical and hazardous waste and PT. AMP can provide the best solutions for their needs.



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Article - How to choose the proper incinerator manufacturer?

The rapid rate growth of population and industries has resulted in the increase of waste both hazardous and non-hazardous waste. The distance between the industrial estate, hospital and other waste generating activity with the surrounding community is getting closer day by day. This close distance proximity has resulted in the community becoming more aware and sensitive to pollution and waste. The industry that generate waste will be considered a place to be avoided, if the waste is managed in a non-compliance manner. Besides, the industry and hospitals are also responsible for the security and safety of the surrounding community. It is unfortunate if the industry and hospital as a means of public health turned out to produce waste that became the source of the spread of disease.

Incinerator is one of the *in-situ* waste destruction systems by inflaming the hazardous and non-hazardous waste at the location of the industry or hospital location. Incinerator is still the safest and most environmentally friendly technology to burn waste, especially B3 waste (Hazardous and Toxic Materials) and one of the category which is now become popular due to the lack of waste management is the Infectious waste which is generated from the Hospital activity. But the incinerator that is required by hospital or industry that would like to burn the B3 waste is certainly not just an ordinary type of incinerator that only operated to burn the B3 waste and resulting the ash as the by product, the incinerator that is used to burn B3 waste must also have a valid license and operating permit from the Ministry of Forestry and Environment (KLHK) and to get licensing there are some rules and mandatory requirement that must be fulfilled by the applicant permit either from industry or hospital when applying for permission of incinerator operation to KLHK. Administration and Technical Aspects must be fulfilled, and all must comply with the latest regulations of the government, namely Government Regulation No. 101 of 2014.

Administrative Requirements

The administrative requirements that must be met by the license requestor refers to PP 101 Year 2014 and Appendix of PP No. 01 of 2013.

Technical Requirements

Design

Proper design and operation of incinerators should achieve desired temperatures, residence times, and other conditions necessary to destroy pathogens, minimize emissions, avoid clinker formation and slagging of the ash (in the primary chamber), avoid refractory damage destruction, and minimize fuel consumption. Good combustion practice (GCP) elements also should be followed to control dioxin and furan emissions.



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Location

The criteria for whether an incinerator unit can obtain a permit from the Ministry of Forestry and Environment (KLHK) should refer to the legal basis (above) at the technical specification stage and the operation of the incinerator. This subject is highly dependent on the below parameters:

- At the time of the incinerator operating it will not produce any smoke and odor and the exhaust gas emission must compliance in accordance with Kep.03/Bapedal/9/1995.
- Gas residence time (Retention Time) of at least 2 seconds.
- Having an air pollution control device (i.e: Wet Scrubber and Cyclone).
- Has a minimum of 14 meters of Chimney height and is calculated from the ground level and has a sampling hole adapted to Kep.205/Bapedal/1996.
- Combustion Efficiency = 99.99%
- Temperature in primary combustion chamber (Primary Chamber) minimum 800°C (operating temperature).
- Temperature in second combustion chamber (Secondary Chamber) minimum temperature 1000°C. Cytotoxic waste management (genotoxic) at temperature $\geq 1.200^{\circ}\text{C}$
- It has a safety incinerator operator against the heat radiation generated from the combustion of the waste (negative pressure)

Be careful in investing incinerators and selecting incinerator manufacturers, with the investment cost of around hundreds of millions or even billions of rupiah, in the end, when submitting the licenses process to KLHK it will not get a final approval for its operational license due to non-compliance both administrative and technical requirement, and this incinerator operating permits are required and mandatory for all who will operating the incinerator.

What should I do?

Experienced companies in making licensed incinerators are companies that can guarantee that their incinerator products will be licensed and not allow the industry or the hospital to take care of its own licenses, because in this case the involvement of the incinerator manufacturer plays an important role. Technical aspects of both the completeness of technical documents compliances, and technical assistance during the process of license submission will need to be assisted by the manufacturer. If the manufacturer has issues with this responsibility and give it fully to the industry or hospital to handle the license process, then the producer cannot be an experienced in making a licensed incinerator from KLHK.

The below checklist will be mandatory for you to check with the incinerator manufacturer as a part of vendor qualification.

1. Does the manufacturer have an Ecolabel or Green Technology registered at KLHK for its incinerator equipment? **YES/NO** (Ask for registration number and check at KLHK website).
2. Does the manufacturer have a track record on the incinerator being produced previously which has pass and manage to get the operating license from KLHK? **YES/NO** (Ask for actual evidence).
3. Does the manufacturer offer full warranty that the equipment being manufactured will pass the operating license from KLHK? **YES/NO**
4. Does the manufacturer are recognized by related association such as the Indonesian Incinerator Manufacturer Association (APII)? **YES/NO** (Ask for evidence).
5. Does the manufacturer offer full warranty and availability of the spare part and technical knowledge transfer for the local incinerator operator? **YES/NO**

Should there is any **NO** in one of the above checklists, then we should be questioning the manufacturer capability and responsibility for the products and license.

For more information regarding incinerator product, please kindly visit <http://cr-enviro.com/our-product/solid-waste-treatment/insinerator/>



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Pipeline Integrity Services Division.



The last quarter of 2018 have been a good year established by the Sales and Marketing by achieving more than 50% of the yearly target. We are currently on the track for this year with ongoing project, we assure that the corporate growth is feasible up to the end of the year.

By the second quarter (Q2), CR-Enviro have re-activated the Pipeline Integrity Services division to support the project-based revenue and to support and accelerate the exponential growth of the company. We believe that pipeline integrity services are one of the major source of income and revenue in the future, as this will support and help our customer needs to any pipeline integrity services requirement with our company.

PT. Centra Rekayasa Enviro also provide Pipeline Integrity Services to our pipeline customer which focusing on operation, inspection and maintenance of critical pipelines. Mostly our services involve in the operation and maintenance of critical piping and pipelines system in the upstream, midstream and downstream activity.

We provide product and services for pipeline maintenance such as emergency repair clamp and composite repair technology for all our pipeline customer.

Please visit the below product and services link for your pipeline integrity services:

- Pipe Repair Clamp: <http://cr-enviro.com/our-product/pipeline-integrity/pipe-repair-clamp/>
- Pipe Composite Repair: <http://cr-enviro.com/our-product/pipeline-integrity/composite-repair/>