

Interviews and preliminary findings – Matrix (初期面談調査 結果)

WIPO Pelangi Wastewater technology needs assessment (WIPO – ベランギ 排水(浄水)に関する技術要望)

Draft: 27 March 2015 (2015 年 3 月 27 日)

*in chronological order of interviews conducted (Up to 25 March and to be added more in the second draft)

No.	Name of company/organization and type (企業/組織名と種類)	Location (場所)	Sector (種別)	Nature and type of wastewater (排水の性質とタイプ)	Preliminary findings(初期調査事項)			Further research needs (今後必要な調査)
					Technology needs (要望技術)	Capacity (能力)	Other issues (その他)	
1.	PT Pandega Citra Kelola (Agung Podomoro Group) --Retail property developer and management	Balikpapan City, East Kalimantan, Indonesia	Commercial /Retail	- Wastewater from food court/kitchen - Wastewater from toilet	Seeks chemical free, low cost and energy efficient wastewater treatment technology	Company has access to debt financing	Infrastructure limitations, lacks regulatory incentive to actively seek technology	Estimate market size of the retail sector in Indonesia
2.	Tofu and Tempeh Production Cooperative (Cottage industry; Small and medium enterprises)	Somber, Balikpapan City, East Kalimantan, Indonesia	Food manufacturing / Small and Medium Enterprises / Cottage industry	Wastewater from tofu and tempeh production contains high levels of BOD and COD contaminants Volume/day: unknown	Space efficient, low cost treatment technology, preferably producing liquid fertilizer as output	Limited access to financing, would require grant	Ambiguous regulatory regarding wastewater treatment, effluent standards and disposal	Draw parallels with other cottage industry or SMEs
3.	PT Kutai Chip Mill (Pulp and paper mill)	Balikpapan, Indonesia	Pulp and paper	Organic wastewater from milling	Seeks Water recycling	Company has access to	Ambiguous regulatory regarding wastewater	Compare with other pulp and paper mill in

No.	Name of company/organization and type (企業/組織名と種類)	Location (場所)	Sector (種別)	Nature and type of wastewater (排水の性質とタイプ)	Preliminary findings(初期調査事項)			Further research needs (今後必要な調査)
					Technology needs (要望技術)	Capacity (能力)	Other issues (その他)	
					technology and assistance in obtaining licensing	financing	treatment, effluent standards and disposal	other parts of Indonesia
4.	Balikpapan city sludge treatment plant	Balikpapan city, Indonesia	Municipal waste management	Solids blocking sewage treatment pipeline (plastics); High concentration of BOD and COD contaminants; High levels of E. Coli	Seeks low cost waste treatment technology that makes optimal use of available infrastructure (existing ponds)	Requires capacity building for operating and maintaining technology	Electricity supply not reliable – facility experiences frequent blackouts	Draw parallels with similar facility in Jambi and West Java
5.	Gran Senyur Hotel	Balikpapan city, Indonesia	Hospitality industry	Wastewater from toilets dumped disposed into septic tanks Waste from kitchen containing solids processed in private treatment facility Untreated	Seeking overhaul of wastewater treatment system—seeing a low cost, energy efficient and integrated system that meets global standard	Limited level of technical expertise and knowledge inside the company	Hospitality industry wastewater treatment is a municipal responsibility and is largely unregulated	

No.	Name of company/organization and type (企業/組織名と種類)	Location (場所)	Sector (種別)	Nature and type of wastewater (排水の性質とタイプ)	Preliminary findings(初期調査事項)			Further research needs (今後必要な調査)
					Technology needs (要望技術)	Capacity (能力)	Other issues (その他)	
				laundry waste (dumped into waterways)				
6.	Balikpapan Municipal Solid Waste Landfill (sanitary landfill)	Balikpapan City, Indonesia	Municipal Waste Management (Public)	Leachate contains heavy metals ions, high levels of BOD and COD contaminants	Seeks space saving, low cost and energy efficient wastewater treatment technology	Requires capacity building for operating and maintaining technology	Requires full range technical assistance to acquiring technology (licensing, patent) to financing	Investigate fiscal incentives to trigger local policy change
7.	Jambi Sludge Treatment Plant	Jambi City, Indonesia	Municipal Waste Management (Public)	High levels of organic contaminant and detergent Pumps lack capacity Insufficient number of sludge removal vehicles	Seeks low cost waste treatment technology that makes optimal use of available infrastructure (existing ponds)	Requires capacity building for operating and maintaining technology	Electricity supply not reliable – facility experiences frequent blackouts	
8.	PT Djambi Waras (Rubber processing plant)	Tanjung Johor, Jambi province,	Manufacturing	High levels of organic contaminant,	Seeks wastewater treatment technology	Seeks full support in terms of technology	Financing aspect: Requires financial guarantee to obtain debt financing	

No.	Name of company/organization and type (企業/組織名と種類)	Location (場所)	Sector (種別)	Nature and type of wastewater (排水の性質とタイプ)	Preliminary findings(初期調査事項)			Further research needs (今後必要な調査)
					Technology needs (要望技術)	Capacity (能力)	Other issues (その他)	
		Indonesia			that provides usable output such as liquid fertilizer	acquisition (licensing, patent)		
9.	PT. Perkebunan Nusantara VI Palm oil mill	Jambi City, Indonesia	Palm oil	Palm Oil Mill Effluent (POME) uses anaerobic digestion in lagoons releases high levels of methane	Seeks POME to electricity or POME to liquid fertilizer technology	Access to public financing under public private scheme	Limited technical and management capacity to acquire new technology	Financing scheme that support acquisition of sustainable POME treatment
10.	PT. Brahma Bina Bakti Palm oil mill	Jambi City, Indonesia	Palm oil	Palm Oil Mill Effluent (POME) uses anaerobic digestion in lagoons releases high levels of methane	Seeks POME to electricity or POME to liquid fertilizer technology	Requires financing facility that would enable debt financing (grant/guarantee)	No land tenure issues; close proximity to electricity transmission	Financing scheme that support acquisition of sustainable POME treatment

To be continued...