Lampiran 1 Tabulasi Studi Feasibilitas

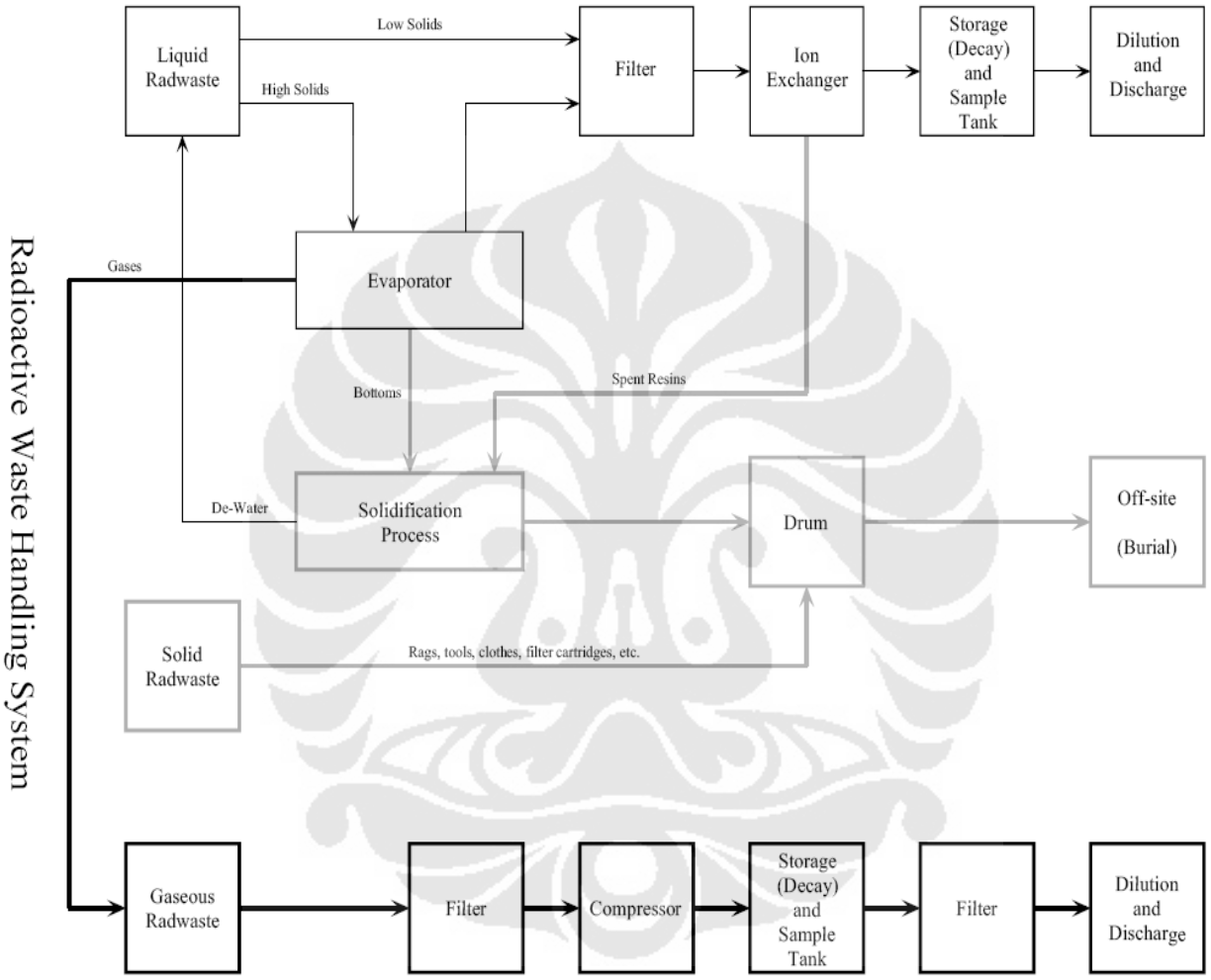
No	*Parameter*	*Defines*	*Grade* (1-10)	ARE	Arafura	*Great* Western	IREL	MAREC	Molycorp
1	Mineral Deposit	*Monazite*	7						
		Bastnaesite	6	7+5 = 12	7+ 4 = 11	6	7+ 4 = 11	7+5 = 12	6
	Bobot (20%)	*Xenotime*	5	12*20% =	11*20% =	6*20% =	11*20% =	12*20% =	6*20% =
		Lain-lain	4	2.4	2.2	1.2	2.2	2.4	1.2
2	Transportasi	*Conveyor*	7		4+ 5=	7+ 4 =	7		7 + 4 =
		Truk	4	7*20% =	9*20% =	11*20% =	7*20% =	7*20% =	11*20% =
	Bobot (20%)	*Rail Bond Vehicles*	5	1.4	1.8	2.2	1.4	1.4	2.2
3	Produksi	*Rare Earth*	6	6+ 4 =	6+ 3 + 4 =	6 + 4 =	6+ 4 =	6	6
		Uranium / Thorium	3	10* 20% =	13*20% =	10*20% =	10*20% =	6*20% =	6*20% =
	Bobot (20%)	Lain-lain	4	2	2.6	2	2	1.2	1.2
4	Mining	*Open Pit*	6	6*20% =	6*20% =	6*20% =	6*20% =	6*20% =	6*20% =
	Bobot (20%)	*Underground*	4	1.2	1.2	1.2	1.2	1.2	1.2
5	*Processing Recoveries*	*Calcining*	2						
		Chlorinating	2						
		Ion Exchange	5						
		Solvent Extraction	5	5 + 2 =	5 + 2 + 2 =	5 + 2 =	5 + 2 + 2 =	5 + 2 + 2 =	5 + 2 =
		Digesting with Acid	2	7*20% =	9*20% =	7*20% =	9*20% =	9*20% =	7*20% =
	Bobot (20%)	*Digesting with Base*	2	1.4	1.8	1.4	1.8	1.8	1.4

Keterangan : Proses tersebut dinilai berdasarkan kuantitas data yang umum, yang dapat memberikan gambaran yang representatif.
Grade disini merupakan rentang penilaian dengan menggunakan skala 1-10, dikali dengan bobot (%)

LAMPIRAN 2 Hasil Studi Feasibilitas

No	Parameter	Perusahaan					
		Ashlan Rare Earth Corporation	Arafura Reasources Limited	Great Western Minerals Group	Indian Rare Earths Limited	Malaysian Rare Earth Corporation	Molycorp Corporation
1	Mineral Deposit	Monazite & Xenotime dari pencucian bijih timah) (Nilai 2,4)	(Monazite & Allanite) dalam batuan pegmatite (Nilai 2,2)	Bastnaesite dalam batuan Pegmatite dan Apatite (Nilai 1,2)	(Monazite, Zircon, Rutile dari sand beach beneficiation) (Nilai 2,2)	Monazite & Xenotime dari pencucian bijih timah) (Nilai 2,4)	Bastnaesite (Nilai 1,2)
	(Bobot 20%)						
2	Transportasi	Conveyor (Nilai 1,4)	Truck and Rail Bond Vehicles (Nilai 1,8)	Loading truck and conveyor (Nilai 2,2)	Conveyor (Nilai 1,4)	Conveyor (Nilai 1,4)	Haul truck and conveyor (Nilai 2,2)
	(Bobot 20%)						
3	Produksi	4,200 TPA (light rare earth), 550 TPA (heavy rare earth), 4,000 TPA (trisodium phosphate) (Nilai 2)	Rare earths (10,000 TPA), Phosphoric acid (150,000 TPA), Uranium (150), Calcium chloride 400,000 TPA) (Nilai 2,6)	Rare earth (5,000 TPA), Trisodium phosphate (Nilai 2)	Rare earth (5000 TPA), rutile, ilmenite, sillimanite (Nilai 2)	Yttrium oxide (200 TPA) from xenotime cracking process (roasting,digestion,filteration) (Nilai 1,2)	Rare earth (5,000 TPA) (Nilai 1,2)
	(Bobot 20%)						
4	Mining	Open pit mining (dry mining) separates from cassiterite ore (Amang plant) (Nilai 1,2)	Open Pit (750,000 TPA ores), Mine life 20 years, Heavy medium separation (30% mass rejection and 95% to recover) (Nilai 1,2)	Open pit mining (180,000 TPA ores), Mine life (20+ years), Heavy medium separation (Nilai 2)	Mining from raw beach sand (dredging) DWC (mining), grinding mills, flotation (concentrating) (Nilai 1,2)	Open pit mining (dry mining) separates from cassiterite ore (Amang plant) (Nilai 1,2)	Open pit, comminution (crushing and grinding) , separation (froth flotation) (Nilai 1,2)
	(Bobot 20%)						
5	Processing Recoveries	Cracking Plants (rare earth concentrates), Purification/ separation (high purity rare earth elements) (Nilai 1,4)	Rare earths (83%), Phosphate (85%), Uranium (80%) From Solvent Extraction, REO extraction, Uranium extraction (Nilai 1,8)	Flotation Concentrate mill, Leaching/ separation (solvent extraction with organic solvent), Precipitation tank (purification) (Nilai 1,4)	Purification (solvent extraction and ion exchange. Calcining (Nilai 1,8)	Cracking Plants (rare earth concentrates), Purification/ separation (high purity rare earth elements) (Nilai 1,8)	concentrating (thickening) Leaching (solvent extraction to gain of high purity rare earth) (Nilai 1,4)
	(Bobot 20%)						
Total		8,4	9,6	8	8,6	8	7,2

LAMPIRAN 3 Radioactive Waste Handling System



LAMPIRAN 4 Pre-feasibility Costs Estimates Accurate to ± 30 %