

#### 4.3.2 General Information of the factory

##### 4.3.2.1 Register new factory information

With this system you can manage the waste inventory of various factories.

Procurar:  +Adicionar

CNPJ	Inscrição Suf	Razão Social	Logradouro/No	Bairro/Distrit	Município	CEP
00.000.000/0001-00		Empresa 1	Endereço 1	Barrio 1	Município 1	cep 1
00.000.000/0002-00		empresa 2	endereço 2	barrio 2	município 2	cep 2

Records: 1 of 2 of

☒ Excluir

#### 4.3.3 General information

Firstly it will be input all the general informations of the factory, and then make codification of the lists of generated waste, raw material, products and production processes, that will be used then in the system.

##### 4.3.3.1 General information of the factory

Empresa Geradora CNPJ: 00.000.000/0001-00

Razão Social: Empresa 1 Inscrição Suf:

**Informações gerais** | Resíduos Gerados | Materia Prima | Produto | Processo Produção | Inventário RSI

Endereço para correspondência:

Logradouro/No:  Bairro/Distrito:

Município:  CEP:

Contato técnico:

Nome:  Fax:

Cargo:  Telefone:

Email:

Características da atividade industrial: Código CNM:

Atividade Principal:  Latitude:

Longitude:

#### 4.3.3.2 List of generated waste

Click to update list of generated waste

Click to add new waste

Double click the [ID] to edit the record

Input the description of the generated waste, and select the appropriate CONAMA waste code and click [OK] to save or [Cancel]

Click to find the appropriate code for the waste. Will appear the next form

Procurar Código de Resíduo Correspondente JICA a CONAMA

Procurar:

Código RSCategoria	Código RSTipo	Código RSUca	RSica_Descricao	Código RSConama	RSConama_Descricao	ID_RSConamajica
1. RI	RINP	NH01	Resíduo de colônia (resíduos de animais tais como ossos, pele e pelos)	A001	Resíduo de refeitórios	56
1. RI	RINP	NH12	Resíduo não-perigoso misturado (Caso código será aplicado no caso de resíduos serem)	A002	Resíduos gerados fora do processo industrial	01
1. RI	RINP	NH13	Outros	A003	Resíduos de varrição de planta	92
1. RI	RINP	NH09	Metais e ligas de metais como alumínio, cobre e bronze.	A004	Refugo de metais ferrosos	75
1. RI	RINP	NH09	Metais e ligas de metais como alumínio, cobre e bronze.	A005	Refugo de metais não ferrosos	76
1. RI	RINP	NH03	Papel	A006	Resíduos de papel e papelão	63
1. RI	RINP	NH04	Plástico ou polímeros e resinas	A007	Resíduos de plástico polimerizado em processo	64
1. RI	RINP	NH07	Borrachas naturais	A008	Resíduos de borracha	71
1. RI	RINP	NH02	Madeira	A009	Resíduos de madeira sem substâncias tóxicas	62
1. RI	RINP	NH05	Têxteis e fibra	A010	Resíduos de materiais têxteis	69

#### 4.3.3.3 List of Raw material

Click to update list of raw material

Input the description of the raw material, the ID will generated automatically by the system

ID	LMA_Descricao	EGE_CNPF
1	materia prima 1	00.000.000/0001-00
(New)		

Record: 1 of 1 | No Filter | Search

#### 4.3.3.1 Product

Click to update list of product

Input the description of the product, the ID will generated automatically by the system

ID	LP_Descricao	EGE_CNPF
1	producto 1	00.000.000/0001-00
(New)		

Record: 1 of 1 | No Filter | Search

#### 4.3.3.2 Production Process

Click to update list of product on process

Input the description of the production process, the ID will generated automatically by the system

#### 4.3.4 Waste Inventory

With this form will manage the waste inventory by year

Click to update the waste inventory

Click to add New Year

Click to update the WI record

To delete WI information, select the year, and [Click] to delete all the information of the WI of that year



#### 4.3.4.1 WI Factory General Information

The screenshot shows the 'F2 Inventário RSI' form. Callouts indicate the following fields and actions:

- Input the year:** Points to the 'Ano' field (2009).
- Click to preview a report:** Points to the 'Imprimir' button.
- Input the delivery data:** Points to the 'Data Entrega' field (02/06/2010).
- Click when the WI is finalize:** Points to the 'Status' checkbox.
- Input the initial, final data:** Points to the 'Data Inicial' (01/01/2009) and 'Data Final' (01/12/2009) fields.
- Click to update the general information of the factory:** Points to the 'Atualizar' button.

The form includes sections for 'Endereço da Unidade Industrial', 'Endereço para Correspondência', 'Dados Técnicos', and 'Período de Produção'.

#### 4.3.4.2 WI Raw Material

The screenshot shows the 'F2 Inventário RSI' form with the 'F22 Produção Anual' tab selected. Callouts indicate the following fields and actions:

- Click to update raw material:** Points to the 'Atualizar' button.
- Click to select the raw material from the list:** Points to the 'Materia Prima' dropdown menu.
- Input the quantity, maximum capacity and unit of raw material utilize within the year of the WI:** Points to the 'Qtd atual (por ano)', 'Capacidade Máxima (por ano)', and 'Unidade' fields.

The form includes a table for raw material data with columns: ID\_MateriaPrima, ID\_Lista\_MateriaPrima, MateriaPrima, Qtd atual (por ano), Capacidade Máxima (por ano), Unidade, and ID\_InventárioRSI.

#### 4.3.4.3 Annual Production

#### 4.3.4.4 WI Production Process

#### 4.3.4.5 WI Generated waste

**F2 Inventário RSI** ID\_InventárioRSI: 1 CNPJ: 00.000.000/0001-00 Ano: 2009 Razão Social: Empresa 1

Período de Referência: DataInício: 01/01/2009 Data Entrega: 02/06/2010 DataFinal: 01/12/2009 Status: ☐

Click to select the main form of generated waste information

Click to update record of generated waste

Categoria do resíduo	Tipo do resíduo	Código de resíduo da CONAMA	Descrição do resíduo	Geração Total	On site total	Off site total	ID_InventárioRSI
1. RI	RINP	A003	resíduo1	400,00	0,00	400,00	1
1. RI	RINP	A008	Resíduo 2	200,00	0,00	200,00	1
1. RI	RINP	A015	Resíduo 3	100,00	50,00	50,00	1

Total: 700,00 50,00 650,00

The information of the generated waste will be input by date, to update the record follow the next step

**F24 Inventário RSI Gerado** ID\_InventárioRSI: 1 Ano: 2009 Data: Razão Social: Empresa 1

CNPJ: 00.000.000/0001-00

ID_InventárioRSI	IRG_Data	NroRSI	GeracaoTotal	OnSiteTotal	OffSiteTotal
1	01/01/2009	3	400,00	50,00	350,00
1	02/12/2009	1	300,00	0,00	300,00

To edit and update the record of existing date, double clic the date and will apper a form to update

To add new date, input the new date in [Data] and the click the [Adicionar Data] button and will apper form to add new date

**F24 Inventário RSI Gerado** ID\_InventárioRSI: 1 Ano: 2009 Data: 01/12/2009 Razão Social: Empresa 1

ID_RSIGerado	processo Produção	Categoria do resíduo	Tipo do resíduo	Código de resíduo da CONAMA	Estado Físico	Descrição do resíduo	Geração Total	On site total	Off site total	Unidade (Ton)
1		1. RI	RINP	A003	S	resíduo1	100,00	0,00	100,00	Ton
3		1. RI	RINP	A008	L	Resíduo 2	200,00	0,00	200,00	Ton
5		1. RI	RINP	A015	S	Resíduo 3	100,00	50,00	50,00	Ton

Click to add new waste record

Click the [ID] to edit and update record

#### Add, edit and update waste record

1. Select the unit and then input total generation of the selected waste

2. Clic [Ok] to save or [Cancel] to cancel

3. Clic to Add the waste flow

4. Select the type of waste from the list, and all the detail of the waste will appear

Here will appear all the list of the waste flow

#### Add, edit and update waste stream record

In this form it will be entered all possible waste streams, the total amount of the all waste stream it will be equal to the Amount of total generation

1. Select On or Off

2. Select type of collection

3. Input the amount of waste of collection

4. If the waste is treated, input the amount, type of treatment and Name of WSC

5. If the waste is recycle, input the amount, type of recycling and Name of WSC

6. If the waste is to final disposal site input the amount, type of final disposal and Name of WSC

7. Clic [Ok] to save or [Cancel] to cancel

7. If the waste is store input the amount, type of storage

#### 4.3.4.6 Preview report of the Waste Inventory

Inicio F0\_EmpresaGeradoraPrincipal F1\_Empresa\_Geradora F2\_InventárioRSI

**F2 Inventário RSI** ID\_InventárioRSI: 1 CNPJ: 00.000.000/0001-00

Razão Social: Empresa 1 Ano: 2009

Período de Referência  
DataInício: 01/01/2009 Data Entrega: 02/06/2010  
DataFinal: 01/12/2009 Status: ☐

Obs:

F2 Informações gerais F21 Lista Materiais Primas F22 Produção Anual F23 Processo Produção F24 Resíduos Gerados

Anualizar RSI Gerados

Categoria do resíduo	Tipo do resíduo	Código de resíduo da CONAMA	Descrição do resíduo	Geração Total	On site total	Off site total	ID Inven
3. RI	R/INP	A003	resíduo 1	100,00	0,00	100,00	
1. RI	R/INP	A008	Resíduo 2	300,00	0,00	300,00	
1. RI	R/INP	A015	Resíduo 3	300,00	90,00	90,00	
Total				700,00	90,00	610,00	

Record: 14 of 1 of 3

Click to preview the waste inventory report, will appear all the information of the factory and the total amount of generated waste by category and the correspondig waste stream

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**INVENTÁRIO NACIONAL DE RESÍDUOS SÓLIDOS INDUSTRIAIS**  
Resolução CONAMA No. 313 de 2002  
Empresa 1 Ano de Referência: 2009

**Informações Gerais da Indústria**

I. Razão social da indústria:  
Empresa 1 Período de Referência  
Início: 01/01/2009 Final: 01/12/2009

II. Endereço da unidade industrial:  
Logradouro: CEP: 00.000.000/0001-00  
Bairro/Distrito: Telefone:  
Município: CNPJ:  
CÓDIGO: 00.000.000/0001-00

III. Endereço para correspondência:  
Logradouro: CEP: 00.000.000/0001-00  
Bairro/Distrito: Telefone:  
Município: CNPJ:

IV. Contato técnico:

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**INVENTÁRIO NACIONAL DE RESÍDUOS SÓLIDOS INDUSTRIAIS**  
Resolução CONAMA No. 313 de 2002  
Empresa 1 Ano de Referência: 2009

Categoria do resíduo: 1. RI

Unidade: Ton/Ano

Geração total: 700,0

On Site: 50,0 (7,1%)

Off Site: 650,0 (92,9%)

Armazenagem: 0,0 (0,0%)

Tratamento: 0,0 (0,0%)

Reciclagem: 0,0 (0,0%)

Disposição final: 50,0 (7,1%)

Transporte: 650,0 (92,9%)

Tratamento: 0,0 (0,0%)

Reciclagem: 300,0 (42,9%)

Disposição final: 350,0 (50,0%)

#### 4.3.5 Information of the Waste Service Company

**Banco de Dados do Inventário de Resíduos**

Principal Tabelas Relatorios Exit

Fabricas Lista Empresa PSR

**ESTUDO PARA O DESENVOLVIMENTO DE UMA SOLUÇÃO INTEGRADA RELATIVA GESTÃO DE RESÍDUOS INDUSTRIAIS NO PÓLO INDUSTRIAL DE MANAUS**

JICA SUFRAMA GOVERNO DO ESTADO DO AMAZONAS IPAAM

To input the information of the Waste Service Company clic [Lista empresa PSR]

**dbo\_Empresa\_PSR** +!Agregar

To add new WSC information clic [Agregar]

presasPSR	PSR_CNPJ	PSR_Nome	PSR_InscricaoEstadual
2	00.000.000/0001-00	psr1	
3	00.000.000/0002-00	psr2	
6	00.000.000/0003-00	psr3	
(New)			

To edit and update WSC information clic [PSR\_CNPJ]

**Empresa PSR**

PSR\_CNPJ: 00.000.000/0001-00

PSR\_Nome: psr1

PSR\_InscricaoEstadual:

PSR\_EnderecoCompleto:

PSR\_Municipio:

PSR\_Bairro:

PSR\_CEP:

PSR\_Fone:

PSR\_Fax:

PSR\_Representante:

PSR\_Cargo:

PSR\_FuncionarioOM:

PSR\_FuncionarioAdmin:

PSR\_Datamaintenance:

PSR\_AreaTotal:

PSR\_AreaPlanta:

1. Input all the information of the WSC

**Tipo de licença das PSR:**

ID_Licença	ID_CódigoTTRD	LC_LCNo	LIC_RegistroPAAM	DataInicio	DataExpiracao	ValidadeDias	LIC_CNPJ	ID_EmpresaPSR
1	Transporte	111	111	01/01/2010	31/12/2010		00.000.000/0001-00	2
2	Reciclagem						00.000.000/0001-00	2
(New)								

2. Select all the type of service that provide the Company, Transport, Treatment, Recycling or Final

#### 4.4 Tables

##### 4.4.1 JICA waste category table

Category	Type	JICA code	Description	No	
1. RI	Non-Hazardous Industrial waste	NH01	Kitchen waste (include waste from animal such as bone, skin, hair)	1	
		NH02	Wood	1	
		NH03	Paper	1	
		NH04	Plastic or polymers and resins	1	
		NH05	Textile and fiber	1	
		NH06	Animal oil, Vegetable oil	1	
		NH07	Rubbers and Leather	1	
		NH08	Ash/dust from coal-fired power plants, etc.	1	
		NH09	Metals and metal alloys such as aluminum, copper, bronze	1	
		NH10	Ceramic & Glasses	1	
		NH11	Stone, sand or material that have composition of soil such as tile, brick, gypsum, cement	1	
		NH12	Mixed waste (This code shall be applied in case wastes are discharged without separation.)	1	
		NH13	Others	1	
	Industrial Waste	RIP	HW01	Inorganic acid	1
			HW02	Organic acid	1
			HW03	Alkalis	1
			HW04	Toxic Compounds	1
			HW05	Inorganic Compounds	1
			HW06	Other Inorganic	1
			HW07	Organic Compounds	1
			HW08	Polymeric Materials	1
			HW09	Fuel, Oil and Grease	1
			HW10	Fine Chemicals and Biocides	1
			HW11	Treatment Sludge	1
			HW12	Ash from incinerator	1
			HW13	Dust and Air pollution control (APC) products	1
			HW14	Other Hazardous substance (besides HW01-HW13)	1
			HW15	Mixed Waste	1
			HW16	Hazardous materials from Non-production process	1
			1. RI Total		
2. RM	Grupo A	RMA1	Group A.1 Biologic	1	
		RMA2	Group A.2 Animals	1	
		RMA3	Group A.3 Body part	1	
		RMA4	Group A.4 Patient care etc	1	
		RMA5	Group A.5 Prions	1	
	Grupo B	RMB1	Chemical etc	1	
	Grupo C	RMC1	Radioactive waste	1	
	Grupo D	RMD1	Common waste	1	
	Grupo E	RME1	Piercing or Cutting	1	
2. RM Total				9	
3. RC	Construccion waste	Classe A	RCA1	from construction, demolition, refitting and repair of pavement	1
			RCA2	from the construction, demolition refitting and repair of edifications: ceramic components	1
			RCA3	from manufacturing and/or demolition process of concrete pre-modulated pieces	1
		Classe B	RCB1	The recyclable waste for other purposes	1
			Classe C	RCC1	Waste which has no economically feasible technology or applications which may allow it to be recycled
		Classe D		RCD1	Hazardous waste arisen from construction process, such as paints, solvents, oils and so forth
3. RC Total				6	
Total geral				44	

#### 4.4.2 CONAMA's waste category table

Category	Type	CONAMA code	Description	No.
1. RI	RINP	A001	Residues of restaurant	1
		A002	Generated residues outside of the industrial process	1
		A003	Residues of varrição of plant	1
		A004	Ferrous metal scrap iron	1
		A005	Not ferrous metal scrap iron	1
		A006	Residues of paper and cardboard	1
		A007	Polymerized plastic residues of process	1
		A008	Rubber residues	1
		A009	Residues wooden I contend not toxic substances	1
		A010	Residues of têxteis materials	1
		A011	Not metallic mineral residues	1
		A012	Slag of aluminum casting	1
		A013	Slag of iron production and steel	1
		A014	Slag of brass casting	1
		A015	Slag of zinc casting	1
		A016	Sand of casting	1
		A017	Refractory ceramic residues and material	1
		A018	Solid residues not toxic metal composites	1
		A019	Solid residues of stations of treatment of effluent I contend material biological not toxic	1
		A021	Solid residues of stations of treatment of effluent I contend not toxic substances	1
		A022	Pastosos residues of stations of treatment of effluent I contend not toxic substances	1
		A023	Pastosos residues I contend limy	1
		A024	Bagasse of sugar cane	1
	Resíduos Industriais não perigosos	A025	Fibre glass	1
		A026	Slag of jateamento I contend not toxic substances	1
		A027	Used catalysers I contend not toxic substances	1
		A028	Residues of system of control of not toxic gaseous emission I contend substance	1
		A029	Other not dangerous residues	1
		A099	Salty shavings	1
		A104	Metallic packings	1
		A105	Not ferrous metal packings	1
		A107	Bombonas of plastic not contaminated	1
		A108	Etil acetate residues vinila	1
		A111	Leached ashes of boiler	1
		A117	Glass residues	1
		A199	Foam	1
		A204	Tambores metallic	1
		A207	Plastic films and small packings	1
		A208	Polyurethane residues (PU)	1
		A299	Caleadas shavings of skins	1
		A308	Silt of the caleiro	1
		A399	Atanado leather shavings, remnants	1
		A499	Carnaça	1
		A599	Residues organic of process	1
		A699	Rind of rice	1
		A799	Atanado leather Serragem, bran and dust	1
		A899	Generated residues outside of the industrial process (office, packings, etc.)	1
		A999	Residues of fruits	1
	RIP	C001 C009	Listing 10 - dangerous residues for containing volatile components	1
		D001	Dangerous residues for presenting inflammability	1
Resíduos Industriais perigosos	Resíduos Industriais perigosos	D002	Dangerous residues for presenting corrosively	1
		D003	Dangerous residues for presenting reactivity	1
		D004	Dangerous residues for presenting pathogenicity	1
		D005 D029	Listing 7 of Norm NBR 10004: dangerous residues characterized by the leaching test	1



Category	Type	CONAMA code	Description	No		
		D099	Other dangerous residues - to specify	1		
		F001_F0301	Listing 1 of Norm NBR 10004- admittedly dangerous residues - Classroom 1, of not-specific sources	1		
		F100	Bifenilas Policloradas - PCB's. Packings contaminated with PCBs also transforming and capacitors	1		
		F102	Residue of catalysers not specified in Norm NBR 10.004	1		
		F103	Deriving residue of industrial laboratories (chemical products) not specified in Norm NBR 10.004	1		
		F104	Not specified contaminated empty packings in Norm NBR 10.004	1		
		F105	Solvent contaminated (to specify solvent and the main contaminante)	1		
		F130	Used lubricant oil	1		
		F230	Hydraulic fluid	1		
		F330	Cutting and hauling oil	1		
		F430	Used contaminated oil in isolation or cooling	1		
		F530	Oil wastes from the water-oil separating system	1		
		K001_K209	Listing 2 of Norm NBR 10004- admittedly dangerous residues of specific sources	1		
		K053	Remaining portions and you splodge of inks and pigments	1		
		K078	Residue of cleanness with solvent in the manufacture of inks	1		
		K081	Silt of ETE of the production of inks	1		
		K193	Shavings of leather tanned to chromium	1		
		K194	Leather Serragem and dust I contend chromium	1		
		K195	Silt of stations of treatment of effluent of tanning to chromium	1		
		K203	Residues of laboratories of research of illnesses	1		
		K207	It splodges of the used oil re-refining (it splodges acid)	1		
		P001_P123	Listing 5 of Norm NBR 10004 - dangerous residues for containing toxic substances acutely	1		
		U001_U246	Listing 6 of Norm NBR 10004- dangerous residues for containing toxic substances	1		
		1. RI Total				77
		2. RM	Grupo_A	RMA1	Group A.1 Biologic	1
				RMA2	Group A.2 Animals	1
RMA3	Group A.3 Body part			1		
RMA4	Group A.4 Patient care etc			1		
RMA5	Group A.5 Prions			1		
Resíduos médicos	Grupo_B		RMB1	Chemical etc	1	
	Grupo_C		RCM1	Radioactive waste	1	
	Grupo_D		RMD1	Common waste	1	
	Grupo_E		RME1	Piercing or Cutting	1	
2. RM Total				9		
3. RC	Classe_A	RCA1	from construction, demolition, refitting and repair of pavement	1		
		RCA2	from the construction, demolition refitting and repair of edifications: ceramic components	1		
		RCA3	from manufacturing and/or demolition process of concrete pre-modulated pieces	1		
	Resíduo de construção	Classe_B	RCB1	The recyclable waste for other purposes	1	
		Classe_C	RCC1	Waste which has no economically feasible technology or applications which may allow it to be recycled	1	
		Classe_D	RCD1	Hazardous waste arisen from construction process, such as paints, solvents, oils and so forth	1	
3. RC Total				6		
Grand Total				92		

#### 4.4.3 CONAMA's storage category

Code for actual generated waste	Code for waste geneted in the past	Description
S01	Z01	Barrel in waterproofing floor, protected area
S11	Z11	Barrel in waterproofing floor, unprotected area
S21	Z21	Barrel on the ground, protected area
S31	Z31	Barrel on the ground, unprotected area
S02	Z02	In bulk on waterproofing floor, protected area
S12	Z12	In bulk on waterproofing floor, unprotected area
S22	Z22	In bulk on the ground, protected area
S32	Z32	In bulk on the ground, unprotected area
S03	Z03	Covered dumper truck
S13	Z13	Uncovered dumper truck
S04	Z04	Tank with contention tray
S14	Z14	Tank without contention tray
S05	Z05	Bottle on waterproofing floor, protected area
S15	Z15	Bottle on waterproofing floor, unprotected area
S25	Z25	Bottle on the ground, protected area
S35	Z35	Bottle on the ground, unprotected area
S09	Z09	Lagoon with waterproofing
S19	Z19	Lagoon without waterproofing
S08	Z08	Other systems (specify)

#### 4.4.4 CONAMA's treatment category

Treatment code	Description
T01	Incinerator
T02	Incinerator with chamber
T05	Outdoor burning
T06	Detonation
T07	Oxidation of cyanides
T08	Chemical encapsulation/fixture or solidification
T09	Chemical oxidation
T10	Precipitation
T11	Detoxification
T12	Neutralization
T13	Adsorption
T15	Biologic treatment
T16	Composting
T17	Drying
T18	Land farming
T19	Thermal plasma
T34	Other treatments (specify)

#### 4.4.5 CONAMA's recycling category

Recycling code	Description
R01	Use in industrial oven (except in heating ovens)
R02	Use in boiler
R03	Co-processing in cement ovens
R04	Blending of wastes
R05	Formulation of micronutrients
R06	Incorporation in agricultural soil
R07	Fertilization and irrigation
R08	Animal reaction
R09	Reprocessing of solvents
R10	Re-refining of oil
R11	Reprocessing of oil
R12	Scrap iron collector
R13	On-site reuse/recycling/recovery
R99	Other forms of reuse/recycling/recovery

#### 4.4.6 CONAMA's final disposal category

Final disposal code	Description
B01	Infiltration in the soil
B02	Municipal Landfill
B03	Own Industrial Landfill
B04	Third-parties Industrial Landfill
B05	Municipal Dumping Site
B06	Private Dumping Site
B20	Sewer
B30	Other (specify)

#### 4.4.7 Corresponding Waste category table JICA to CONAMA

Category	Type	JICA code		CONAMA code	
		Code	Description	Code	Description
1. RI	RINP	NH01	Kitchen waste (include waste from animal such as bone, skin, hair)	A001	Residues of restaurant
				A024	Bagasse of sugar cane
				A499	Carapaça
				A599	Residues organic of process
				A699	Rind of rice
				A999	Residues of fruits
		NH02	Wood	A009	Residues wooden I contend not toxic substances
		NH03	Paper	A006	Residues of paper and cardboard
		NH04	Plastic or polymers and resins	A007	Polymerized plastic residues of process
				A107	Bombonas of plastic not contaminated
				A108	Etil acetate residues vinila
				A207	Plastic films and small packings
				A208	Polyurethane residues (PU)
		NH05	Textile and fiber	A010	Residues of têxteis materials
		NH06	Animal oil, Vegetable oil	Z999	?
		NH07	Rubbers and Leather	A008	Rubber residues
				A299	Caleadas shavings of skins
				A399	Atanado leather shavings, remnants
		NH08	Ash/dust from coal-fired power plants, etc.	A111	Leached ashes of boiler
		NH09	Metals and metal alloys such as aluminum, copper, bronze	A004	Ferrous metal scrap iron
				A005	Not ferrous metal scrap iron
				A011	Not metallic mineral residues
				A012	Slag of aluminum casting
				A013	Slag of iron production and steel
				A014	Slag of brass casting
				A015	Slag of zinc casting
				A016	Sand of casting
				A104	Metallic packings
				A105	Not ferrous metal packings
				A204	Tambores metallic
		NH10	Ceramic & Glasses	A017	Refractory ceramic residues and material
				A025	Fibre glass
				A117	Glass residues
				A799	Atanado leather Serragem, bran and dust
		NH11	Stone, sand or material that have composition of soil such as tile, brick, gypsum, cement	Z999	?
		NH12	Mixed waste (This code shall be applied in case wastes are discharged without separation.)	A002	Generated residues outside of the industrial process
		NH13	Others	A003	Residues of varrição of plant
				A018	Solid residues not toxic metal composites
				A019	Solid residues of stations of treatment of effluent I contend material biological not toxic
				A021	Solid residues of stations of treatment of effluent I contend not toxic substances
				A022	Pastosos residues of stations of treatment of effluent I contend not toxic substances

Category	Type	JICA code		CONAMA code	
		Code	Description	Code	Description
RIP	HW01	Inorganic acid		A023	Pastosos residues I contend limy
				A026	Slag of jateamento I contend not toxic substances
				A027	Used catalysers I contend not toxic substances
				A028	Residues of system of control of not toxic gaseous emission I contend substance
				A029	Other not dangerous residues
				A099	Salty shavings
				A199	Foam
				A308	Silt of the caleiro
				A899	Generated residues outside of the industrial process (office, packings, etc.)
				D002	Dangerous residues for presenting corrosively
	HW02	Organic acid		D003	Dangerous residues for presenting reactivity
				K207	It splodges of the used oil re-refining (it splodges acid)
	HW03	Alkalis		D002	Dangerous residues for presenting corrosively
				D003	Dangerous residues for presenting reactivity
	HW04	Toxic Compounds		F001_F0301	Listing 1 of Norm NBR 10004- admittedly dangerous residues - Classroom 1, of not-specific sources
				F103	Deriving residue of industrial laboratories (chemical products) not specified in Norm NBR 10.004
				F130	Used lubricant oil
				F230	Hydraulic fluid
				F330	Cutting and hauling oil
				F430	Used contaminated oil in isolation or cooling
				F530	Oil wastes from the water-oil separating system
				K001_K209	Listing 2 of Norm NBR 10004- admittedly dangerous residues of specific sources
				K193	Shavings of leather tanned to chromium
				K194	Leather Serragem and dust I contend chromium
				K195	Silt of stations of treatment of effluent of tanning to chromium
				D005_D029	Listing 7 of Norm NBR 10004: dangerous residues characterized by the leaching test
				D005_D029	Listing 7 of Norm NBR 10004: dangerous residues characterized by the leaching test
				D003	Dangerous residues for presenting reactivity
				F001_F0301	Listing 1 of Norm NBR 10004- admittedly dangerous residues - Classroom 1, of not-specific sources
				F100	Bifenilas Policloradas - PCB's. Packings contaminated with PCBs also transforming and capacitors
				F105	Solvent contaminated (to specify solvent and the main contaminante)
				F130	Used lubricant oil
				F230	Hydraulic fluid
				F330	Cutting and hauling oil
				F430	Used contaminated oil in isolation or cooling
				F530	Oil wastes from the water-oil separating system
				K001_K209	Listing 2 of Norm NBR 10004- admittedly dangerous residues of specific sources
				K053	Remaining portions and you splodge of inks and pigments
				K078	Residue of cleanness with solvent in the manufacture of inks
				K081	Silt of ETE of the production of inks
				P001_P123	Listing 5 of Norm NBR 10004 - dangerous residues for containing toxic substances acutely
HW08	Polymeric Materials			D001	Dangerous residues for presenting inflammability
				D001	Dangerous residues for presenting inflammability
HW09	Fuel, Oil and Grease			D001	Dangerous residues for presenting inflammability
				K207	It splodges of the used oil re-refining (it splodges acid)

Category	Type	JICA code		CONAMA code	
		Code	Description	Code	Description
		HW10	Fine Chemicals and Biocides	D001 D004 D005_D029 F103 K203	Dangerous residues for presenting inflammability Dangerous residues for presenting pathogenicity Listing 7 of Norm NBR 10004: dangerous residues characterized by the leaching test Deriving residue of industrial laboratories (chemical products) not specified in Norm NBR 10.004 Residues of laboratories of research of illnesses
		HW11	Treatment Sludge	D005_D029 K081	Listing 7 of Norm NBR 10004: dangerous residues characterized by the leaching test Silt of ETE of the production of inks
		HW12	Ash from incinerator	Z999	?
		HW13	Dust and Air pollution control (APC) products	Z999	?
		HW14	Other Hazardous substance (besides HW01-HW13)	C001_C009 D001 D004 D099 F102 F104 U001_U246	Listing 10 - dangerous residues for containing volatile components Dangerous residues for presenting inflammability Dangerous residues for presenting pathogenicity Other dangerous residues - to specify Residue of catalysers not specified in Norm NBR 10.004 Not specified contaminated empty packings in Norm NBR 10.004 Listing 6 of Norm NBR 10004- dangerous residues for containing toxic substances
		HW15	Mixed Waste	Z999	?
		HW16	Hazardous materials from Non-production process	Z999	?
2. RC	Classe A	RCA1	from construction, demolition, refitting and repair of pavement	RCA1	from construction, demolition, refitting and repair of pavement
		RCA2	from the construction, demolition refitting and repair of edifications: ceramic components	RCA2	from the construction, demolition refitting and repair of edifications: ceramic components
		RCA3	from manufacturing and/or demolition process of concrete pre-modulated pieces	RCA3	from manufacturing and/or demolition process of concrete pre-modulated pieces
	Classe B	RCB1	The recyclable waste for other purposes	RCB1	The recyclable waste for other purposes
	Classe C	RCC1	Waste which has no economically feasible technology or applications which may allow it to be recycled	RCC1	Waste which has no economically feasible technology or applications which may allow it to be recycled
	Classe D	RCD1	Hazardous waste arisen from construction process, such as paints, solvents, oils and so forth	RCD1	Hazardous waste arisen from construction process, such as paints, solvents, oils and so forth
3. RM	Grupo A	RMA1	Group A.1 Biologic	RMA1	Group A.1 Biologic
		RMA2	Group A.2 Animals	RMA2	Group A.2 Animals
		RMA3	Group A.3 Body part	RMA3	Group A.3 Body part
		RMA4	Group A.4 Patient care etc	RMA4	Group A.4 Patient care etc
		RMA5	Group A.5 Prions	RMA5	Group A.5 Prions
	Grupo B	RMB1	Chemical etc	RMB1	Chemical etc
	Grupo C	RMC1	Radioactive waste	RMC1	Radioactive waste
	Grupo D	RMD1	Common waste	RMD1	Common waste
	Grupo E	RME1	Piercing or Cutting	RME1	Piercing or Cutting

#### 4.4.8 Corresponding waste category table CONAMA to JICA

Category	Type	CONAMA code		JICA code	
		Code	Description	Code	Description
I. RI	RINP	A001	Residues of restaurant	NH01	Kitchen waste (include waste from animal such as bone, skin, hair)
		A002	Generated residues outside of the industrial process	NH12	Mixed waste (This code shall be applied in case wastes are discharged without separation.)
		A003	Residues of variação of plant	NH13	Others
		A004	Ferrous metal scrap iron	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A005	Not ferrous metal scrap iron	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A006	Residues of paper and cardboard	NH03	Paper
		A007	Polymerized plastic residues of process	NH04	Plastic or polymers and resins
		A008	Rubber residues	NH07	Rubbers and Leather
		A009	Residues wooden I contend not toxic substances	NH02	Wood
		A010	Residues of têxteis materials	NH05	Textile and fiber
		A011	Not metallic mineral residues	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A012	Slag of aluminum casting	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A013	Slag of iron production and steel	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A014	Slag of brass casting	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A015	Slag of zinc casting	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A016	Sand of casting	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A017	Refractory ceramic residues and material	NH10	Ceramic & Glasses
		A018	Solid residues not toxic metal composites	NH13	Others
		A019	Solid residues of stations of treatment of effluent I contend material biological not toxic	NH13	Others
		A021	Solid residues of stations of treatment of effluent I contend not toxic substances	NH13	Others
		A022	Pastosos residues of stations of treatment of effluent I contend not toxic substances	NH13	Others
		A023	Pastosos residues I contend limy	NH13	Others
		A024	Bagasse of sugar cane	NH01	Kitchen waste (include waste from animal such as bone, skin, hair)
		A025	Fibre glass	NH10	Ceramic & Glasses
		A026	Slag of jateamento I contend not toxic substances	NH13	Others
		A027	Used catalysers I contend not toxic substances	NH13	Others
		A028	Residues of system of control of not toxic gaseous emission I contend substance	NH13	Others
		A029	Other not dangerous residues	NH13	Others
		A099	Salty shavings	NH13	Others
		A104	Metallic packings	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A105	Not ferrous metal packings	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A107	Bombonas of plastic not contaminated	NH04	Plastic or polymers and resins
		A108	Etil acetate residues vinila	NH04	Plastic or polymers and resins
		A111	Leached ashes of boiler	NH08	Ash/dust from coal-fired power plants, etc.
		A117	Glass residues	NH10	Ceramic & Glasses
		A199	Foam	NH13	Others
		A204	Tambores metallic	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A207	Plastic films and small packings	NH04	Plastic or polymers and resins
		A208	Polyurethane residues (PU)	NH04	Plastic or polymers and resins
		A299	Caleadas shavings of skins	NH07	Rubbers and Leather
		A308	Silt of the caleiro	NH13	Others
		A399	Atanado leather shavings, remnants	NH07	Rubbers and Leather

Category	Type	CONAMA code		JICA code	
		Code	Description	Code	Description
		A499	Carnaça	NH01	Kitchen waste (include waste from animal such as bone, skin, hair)
		A599	Residues organic of process	NH01	Kitchen waste (include waste from animal such as bone, skin, hair)
		A699	Rind of rice	NH01	Kitchen waste (include waste from animal such as bone, skin, hair)
		A799	Atanado leather Serragem, bran and dust	NH10	Ceramic & Glasses
		A899	Generated residues outside of the industrial process (office, packings, etc.)	NH13	Others
		A999	Residues of fruits	NH01	Kitchen waste (include waste from animal such as bone, skin, hair)
		Z999	?	NH06	Animal oil, Vegetable oil
				NH11	Stone, sand or material that have composition of soil such as tile, brick, gypsum, cement
RIP	C001_C009	Listing 10 - dangerous residues for containing volatile components		HW14	Other Hazardous substance (besides HW01-HW13)
	D001	Dangerous residues for presenting inflammability		HW08	Polymeric Materials
				HW09	Fuel, Oil and Grease
				HW10	Fine Chemicals and Biocides
				HW14	Other Hazardous substance (besides HW01-HW13)
	D002	Dangerous residues for presenting corrosively		HW01	Inorganic acid
				HW02	Organic acid
				HW03	Alkalis
	D003	Dangerous residues for presenting reactivity		HW01	Inorganic acid
				HW02	Organic acid
				HW03	Alkalis
				HW07	Organic Compounds
	D004	Dangerous residues for presenting pathogenicity		HW10	Fine Chemicals and Biocides
				HW14	Other Hazardous substance (besides HW01-HW13)
	D005_D029	Listing 7 of Norm NBR 10004: dangerous residues characterized by the leaching test		HW05	Inorganic Compounds
				HW06	Other Inorganic
				HW10	Fine Chemicals and Biocides
				HW11	Treatment Sludge
	D099	Other dangerous residues - to specify		HW14	Other Hazardous substance (besides HW01-HW13)
	F001_F0301	Listing 1 of Norm NBR 10004- admittedly dangerous residues - Classroom 1, of not-specific sources		HW04	Toxic Compounds
				HW07	Organic Compounds
	F100	Bifenilas Policloradas - PCB's. Packings contaminated with PCBs also transforming and capacitors		HW07	Organic Compounds
				HW07	Organic Compounds
	F102	Residue of catalysers not specified in Norm NBR 10.004		HW14	Other Hazardous substance (besides HW01-HW13)
	F103	Deriving residue of industrial laboratories (chemical products) not specified in Norm NBR 10.004		HW04	Toxic Compounds
				HW10	Fine Chemicals and Biocides
	F104	Not specified contaminated empty packings in Norm NBR 10.004		HW14	Other Hazardous substance (besides HW01-HW13)
	F105	Solvent contaminated (to specify solvent and the main contaminante)		HW07	Organic Compounds
	F130	Used lubricant oil		HW04	Toxic Compounds
				HW07	Organic Compounds
	F230	Hydraulic fluid		HW04	Toxic Compounds
				HW07	Organic Compounds
	F330	Cutting and hauling oil		HW04	Toxic Compounds
				HW07	Organic Compounds
	F430	Used contaminated oil in isolation or cooling		HW04	Toxic Compounds
				HW07	Organic Compounds
	F530	Oil wastes from the water-oil separating system		HW04	Toxic Compounds
				HW07	Organic Compounds

Category	Type	CONAMA code		JICA code	
		Code	Description	Code	Description
		K001_K209	Listing 2 of Norm NBR 10004- admittedly dangerous residues of specific sources	HW04	Toxic Compounds
		K053	Remaining portions and you splodge of inks and pigments	HW07	Organic Compounds
		K078	Residue of cleanness with solvent in the manufacture of inks	HW07	Organic Compounds
		K081	Silt of ETE of the production of inks	HW07	Organic Compounds
		K193	Shavings of leather tanned to chromium	HW11	Treatment Sludge
		K194	Leather Serragem and dust I contend chromium	HW04	Toxic Compounds
		K195	Silt of stations of treatment of effluent of tanning to chromium	HW04	Toxic Compounds
		K203	Residues of laboratories of research of illnesses	HW10	Fine Chemicals and Biocides
		K207	It splodges of the used oil re-refining (it splodges acid)	HW01	Inorganic acid
				HW09	Fuel, Oil and Grease
		P001_P123	Listing 5 of Norm NBR 10004 - dangerous residues for containing toxic substances acutely	HW07	Organic Compounds
		U001_U246	Listing 6 of Norm NBR 10004- dangerous residues for containing toxic substances	HW14	Other Hazardous substance (besides HW01-HW13)
		Z999	?	HW12	Ash from incinerator
				HW13	Dust and Air pollution control (APC) products
				HW15	Mixed Waste
				HW16	Hazardous materials from Non-production process
2. RC	Classe_ A	RCA1	from construction, demolition, refitting and repair of pavement	RCA1	from construction, demolition, refitting and repair of pavement
		RCA2	from the construction, demolition refitting and repair of edifications: ceramic components	RCA2	from the construction, demolition refitting and repair of edifications: ceramic components
		RCA3	from manufacturing and/or demolition process of concrete pre-modulated pieces	RCA3	from manufacturing and/or demolition process of concrete pre-modulated pieces
	Classe_ B	RCB1	The recyclable waste for other purposes	RCB1	The recyclable waste for other purposes
	Classe_ C	RCC1	Waste which has no economically feasible technology or applications which may allow it to be recycled	RCC1	Waste which has no economically feasible technology or applications which may allow it to be recycled
	Classe_ D	RCD1	Hazardous waste arisen from construction process, such as paints, solvents, oils and so forth	RCD1	Hazardous waste arisen from construction process, such as paints, solvents, oils and so forth
3. RM	Grupo_ A	RMA1	Group A.1 Biologic	RMA1	Group A.1 Biologic
		RMA2	Group A.2 Animals	RMA2	Group A.2 Animals
		RMA3	Group A.3 Body part	RMA3	Group A.3 Body part
		RMA4	Group A.4 Patient care etc	RMA4	Group A.4 Patient care etc
		RMA5	Group A.5 Prions	RMA5	Group A.5 Prions
	Grupo_ B	RMB1	Chemical etc	RMB1	Chemical etc
	Grupo_ C	RMC1	Radioactive waste	RMC1	Radioactive waste
	Grupo_ D	RMD1	Common waste	RMD1	Common waste
	Grupo_ E	RME1	Piercing or Cutting	RME1	Piercing or Cutting





ID CNAE Secoes	Text	1
CNAE Secoes	Text	200

Table: dbo\_Codigo\_CNAE\_SubClasses

Name	Type	Size
ID_CNAE_SubClasses	Text	10
ID_CNAE_Secoes	Text	1
ID_CNAE_Divisoas	Text	2
ID_CNAE_Grupo	Text	3
ID_CNAE_Classes	Text	6
CNAE_SubClasses	Text	200

Table: dbo\_Codigo\_RsCategoria

Name	Type	Size
ID_CodigoRsCategoria	Text	6
RsCategoria_Descricao	Text	50
RsCategoria_DescricaoEn	Text	50

Table: dbo\_Codigo\_RsConama

Name	Type	Size
ID_CodigoRsConama	Text	10
ID_CodigoRsCategoria	Text	6
ID_CodigoRsTipo	Text	10
RsConama_Descricao	Text	100
RsConama_Obs	Memo	-

Table: dbo\_Codigo\_RsJica

Name	Type	Size
ID_CodigoRsJica	Text	4
ID_CodigoRsCategoria	Text	6
ID_CodigoRsTipo	Text	10
RsJica_Descricao	Text	100
RsJica_Obs	Memo	-

Table: dbo\_Codigo\_RsJICA\_CONAMA

Name	Type	Size
ID_RSConamaJica	Long Integer	4
ID_CodigoRsCategoria	Text	6
ID_CodigoRsTipo	Text	10
ID_CodigoRsJica	Text	4
ID_CodigoRsConama	Text	10
RsJica_Descricao	Text	255
RsConama_Descricao	Text	255

Table: dbo\_Codigo\_RsTipo

Name	Type	Size
ID_CodigoRsTipo	Text	10
ID_CodigoRsCategoria	Text	6
RsTipo_Descricao	Text	100
RsTipo_DescricaoEn	Text	100

Table: dbo\_Codigo\_TTRD

Name	Type	Size
ID_CodigoTTRD	Text	2
CodigoTTRD_Descricao	Text	20

Table: dbo\_Codigo\_Unidad

Name	Type	Size
ID_CodigoUnidad	Long Integer	4
CUN_Nome	Text	50
CUN_Sigla	Text	10

Table: dbo\_Empresa\_Geradora

Name	Type	Size
EGE_CNPJ	Text	20
EGE_Ins_Suframa	Text	20

EGE RazaoSocial	Text	50
EGE EC LogradouroNo	Text	100
EGE EC Bairro	Text	50
EGE EC Municipio	Text	20
EGE EC CEP	Text	20
EGE EC Telefone	Text	50
EGE TR Nome	Text	50
EGE TR Cargo	Text	20
EGE TR Email	Text	50
EGE TR Telefone	Text	50
EGE TR Fax	Text	50
EGE AI AtividadePrincipal	Text	100
EGE AI CNAE	Text	10
EGE AI Latitude	Text	25
EGE AI Longitude	Text	25

Table: dbo\_Empresa\_PSR

Name	Type	Size
ID_EmpresaPSR	Long Integer	4
PSR_CNPI	Text	20
PSR_Nome	Text	100
PSR_InscricaoEstadual	Text	15
PSR_EnderecoCorresp	Text	100
PSR_Municipio	Text	50
PSR_Bairro	Text	50
PSR_CEP	Text	25
PSR_Fone	Text	50
PSR_Fax	Text	50
PSR_Representante	Text	25
PSR_Cargo	Text	25
PSR_FuncionarioOM	Long Integer	4
PSR_FuncionarioAdmin	Long Integer	4
PSR_DataInstalacao	Date/Time	8
PSR_AreaTotal	Long Integer	4
PSR_AreaPlanta	Long Integer	4

Table: dbo\_Inventario\_RSI

Name	Type	Size
ID_InventarioRSI	Long Integer	4
EGE_CNPI	Text	20
IRI_DataEntrega	Date/Time	8
IRI_DataInicio	Date/Time	8
IRI_DataFinal	Date/Time	8
IRI_Ano	Long Integer	4
IRI_Ok	Yes/No	1
IRI_Observacao	Memo	-
EGE_UI LogradouroNo	Text	100
EGE_UI Bairro	Text	50
EGE_UI Municipio	Text	20
EGE_UI CGCTE	Text	20
EGE_UI CEP	Text	20
EGE_UI Telefone	Text	50
EGE_EC LogradouroNo	Text	100
EGE_EC Bairro	Text	50
EGE_EC Municipio	Text	20
EGE_EC CEP	Text	20
EGE_EC Telefone	Text	50
EGE_TR Nome	Text	50
EGE_TR Cargo	Text	50
EGE_TR Email	Text	50
EGE_TR Telefone	Text	50
EGE_TR Fax	Text	50
EGE_AI PPHsDia	Integer	2
EGE_AI PPDiaMes	Integer	2
EGE_AI PPMesAno	Integer	2

EGE AI NFProducao	Long Integer	4
EGE AI NFAdmin	Long Integer	4
EGE AI NFOtros	Long Integer	4
EGE AI AreaUtilTotal	Long Integer	4
EGE AI Latitude	Text	25
EGE AI Longitude	Text	25
EGE RE Nome	Text	50
EGE RE Cargo	Text	50

Table: dbo\_Inventario\_RSIFluxo

Name	Type	Size
ID RsiFluxo	Long Integer	4
ID RSIGerado	Long Integer	4
ID OnOff	Text	3
ID Coleta	Long Integer	4
ID TransporteCNPJ	Text	20
RSF TransporteQtd	Double	8
RSF TransporteObs	Memo	-
ID TratamentoCNPJ	Text	20
ID CodigoTratamento	Text	4
RSF TratamentoQtd	Double	8
RSF TratamentoObs	Memo	-
ID ReciclagemCNPJ	Text	20
ID CodigoReciclagem	Text	4
RSF ReciclagemQtd	Double	8
RFS ReciclagemObs	Memo	-
ID DFinalCNPJ	Text	20
ID CodigoDFinal	Text	4
RSF DFinalQtd	Double	8
RSF DFinalObs	Memo	-
ID CodigoArmazenamento	Text	4
RSF ArmazenamentoLugar	Text	50
RSF ArmazenamentoQtd	Double	8
RSF Arm Latitude	Text	20
RSF Arm Longitude	Text	20
RSF Arm Obs	Memo	-

Table: dbo\_Inventario\_RSIGerado

Name	Type	Size
ID RSIGerado	Long Integer	4
ID InventarioRSI	Long Integer	4
IRG Data	Date/Time	8
ID ProducaoProceso	Long Integer	4
ID Lista_RSIGerado	Long Integer	4
RSI ProcesoProducao	Yes/No	1
ID CodigoRsCategoria	Text	6
ID CodigoRsTipo	Text	10
ID CodigoRsJica	Text	4
ID CodigoRsConama	Text	10
ID EstadoFisico	Text	1
IRG DescricaoResiduo	Text	100
ID CodigoUnidade	Text	3
IRG GeracaoTotal	Double	8
IRG OnSiteTotal	Double	8
IRG OffSiteTotal	Double	8
IRG Observacao	Memo	-

Table: dbo\_Licenca

Name	Type	Size
ID Licenca	Long Integer	4
ID EmpresaPSR	Long Integer	4
LIC CNPJ	Text	20
ID CodigoTTRD	Text	2
LIC LONo	Text	15
LIC ProcesoNo	Text	15

LIC_RegistroIPAAM	Text	10
ID_CodigoLicencaPSR	Text	4
ID_CodigoModalidade	Text	2
LIC_Tipo	Text	15
LIC_Renovacao	Text	30
LIC_Actividade	Text	50
LIC_Localizacao	Text	100
LIC_Latitude	Text	20
LIC_Longitude	Text	20
LIC_Representante	Text	50
LIC_Telefone	Text	50
ID_CodigoPoluidor	Text	1
ID_CodigoPorte	Text	1
LIC_DataInicio	Date/Time	8
LIC_DataExpiracao	Date/Time	8
LIC_ValidadeDias	Long Integer	4
LIC_NroRestricoes	Long Integer	4
LIC_NomeDiretoriaTecnica	Text	50
LIC_NomeDiretorPresidente	Text	50
LIC_Nota	Memo	-

Table: dbo\_Lista\_MateriaPrima

Name	Type	Size
ID_Lista_MateriaPrima	Long Integer	4
EGE_CNPJ	Text	20
LMA_Descricao	Text	100

Table: dbo\_Lista\_ProcessoProducao

Name	Type	Size
ID_Lista_ProcessoProducao	Long Integer	4
EGE_CNPJ	Text	20
LPP_Descricao	Text	100
LPP_Obs	Memo	-

Table: dbo\_Lista\_Produto

Name	Type	Size
ID_Lista_Produto	Long Integer	4
EGE_CNPJ	Text	20
LP_Descricao	Text	100

Table: dbo\_Lista\_RSIGerado

Name	Type	Size
ID_Lista_RSIGerado	Long Integer	4
EGE_CNPJ	Text	20
RSI_Descricao	Text	100
ID_CodigoRsTipo	Text	10
ID_CodigoRsCategoria	Text	6
ID_CodigoRSConama	Text	10
ID_CodigoRsJica	Text	4
ID_EstadoFisico	Text	1
RSI_ProcessoProducao	Yes/No	1
ID_Lista_ProcessoProducao	Long Integer	4

Table: dbo\_MateriaPrima

Name	Type	Size
ID_MateriaPrima	Long Integer	4
ID_InventarioRSI	Long Integer	4
ID_Lista_MateriaPrima	Long Integer	4
MP_MateriaPrima	Text	50
MP_QntAnual	Long Integer	4
MP_QntMaxima	Long Integer	4
ID_CodigoUnidade	Text	25

Table: dbo\_Producao

Name	Type	Size
ID_Producao	Long Integer	4

ID_InventarioRSI	Long Integer	4
ID_Lista_Producto	Long Integer	4
PRO_Producto	Text	50
PRO_QntAnual	Long Integer	4
PRO_QntMaxima	Long Integer	4
ID_CodigoUnidade	Text	25

Table: dbo\_Producao\_Processo

Name	Type	Size
ID_ProducaoProceso	Long Integer	4
ID_InventarioRSI	Long Integer	4
ID_Lista_ProcessoProducao	Long Integer	4
PPR_ProcessoProducao	Yes/No	1
PPR_Descricao	Text	100
PPR_Observacao	Memo	-

## **5.8 WSC\_DB System User Guide**



***THE STUDY FOR  
THE DEVELOPMENT OF  
AN INTEGRATED SOLUTION RELATED TO  
INDUSTRIAL WASTE MANAGEMENT  
IN THE INDUSTRIAL POLE OF MANAUS***

**Waste Service Company  
Database**

**User Guide**

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## 1 Purpose

To properly manage industrial waste, it is essential to eliminate non-licensed entities and foster sound waste service companies (WSC). In order to do so, those who are operating such services will acquire an operation license (OL) through the registration system and then pursue such activities in accordance with that license.

However, the existing registration system is not functioning as imagined for the following reasons:

- The application for WSCs contains complex and detailed categories and options that make it difficult to understand under which category one's activities should be placed.
- Actual activities are not in accordance with the items in that category.
- It is difficult for IPAAM to decipher WSCs in the license list because the places of the registration are dispersed in various different categories.
- Also, the following conditions have invited improper disposal of industrial waste and hindered proper industrial waste management.
- The waste generators who are obliged to consign their IW to registered WSCs will not know who the actual registered waste service company is unless a correct and simple registration list is informed.
- Difficulties in properly operating and maintaining the registration system is contributing to non-licensed entities conducting activities.

In order to improve such conditions and guarantee proper management of industrial wastes, it is necessary for all parties, starting with the administrative bodies and including the waste service companies and waste generators as well, to immediately form a new registration management system that uniformly manages waste service companies in an easily understandable manner. To do so, IPAAM has collaborated with the study team from JICA to explore the possibility of establishing a registration system that would introduce a new category for waste management, as shown below, which includes 4 sub-categories for collection and transportation, intermediate treatment, recycling and final disposal, in accordance with actual activities.

Code	Major Classification	Code	Sub-Classification	Class [Types of Waste Handled]
33	Municipal Waste Management	3301	Collection and Transportation	Class I (HW), Class II-A(Non-HW & Non-Inert), Class II-B (Non-HW & Inert)
		3302	Intermediate Treatment	Class I (HW), Class II-A(Non-HW & Non-Inert), Class II-B (Non-HW & Inert)
		3303	Recycling	Class II-A (Non-HW & Non-Inert), Class II-B (Non-HW & Inert)
		3304	Final Disposal	Class II-A (Non-HW & Non-Inert), Class II-B (Non-HW & Inert)
34	Industrial Waste Management	3401	Collection and Transportation	Class I (HW), Class II-A(Non-HW & Non-Inert), Class II-B (Non-HW & Inert)
		3402	Intermediate Treatment	Class I (HW), Class II-A(Non-HW & Non-Inert), Class II-B (Non-HW & Inert)

				Class II-B (Non-HIW & Inert)
		3403	Recycling	Class II-A (Non-HIW & Non-Inert), Class II-B (Non-HIW & Inert)
		3404	Final Disposal	Class II-A (Non-HIW & Non-Inert), Class II-B (Non-HIW & Inert)

## 2 Recommendation for Improving Categorization of Waste-related Environmental Licensing

### 2.1 Current Issues

The categories are not organized from the view point of waste management since they are complex and dispersed across a range of larger categories, making it difficult to make use of them for appropriate operator management.

### 2.2 Waste Management related Codes of IPAAM for Environmental Licensing

Code	Class	Code	Sub-Class	
				Impact
22 * *	Commerce and Services	2217	Incineration	High
		2218	Co-processing of wastes	High
		2219	Agrochemical Collection Center	Moderate
24 * *	Other Services (including provision of electricity and water)	2407	Solid Industrial Waste Collection and/or Treatment	High
		2408	Municipal Waste Final Destination	High
		2410	Collection and Transport of Inert Solid Waste	Minimal
		2411	Collection and/or Storage and/or Commercialization of Solid Waste (e.g. recycling)	Moderate
		2412	Collection and/or Treatment of Hazardous Liquid Industrial Waste	High
		2417	Industrial Waste Disposal in Landfill	High
26 * *	Transportation	2615	Transport and Storage of Hazardous Solid Industrial Waste	High
30 * *	Waste Treatment and Recycling	3001	Treatment and Recycling of Solid Industrial Waste without chemicals	Moderate
		3002	Treatment and Recycling of Industrial Liquid Waste	Moderate
		3003	Treatment and Recycling of Solid Industrial Waste without Chemicals	High
		3004	Treatment and Recycling of Palettes	Moderate
		3005	Paper and Cardboard Recycling	Moderate
		3006	Treatment and Recycling of Mineral Waste (Waste Re-processing)	Moderate

(Source) Classificacao das Fontes Poluidoras IN 001/06 Publicada em (3/12/2007)

### **2.3 Aim of Improvements**

For the managing body (IPAAM), and waste service companies (WSC), as well as for waste generators which select operators, to be able to easily utilize the licensing system by establishing a simple and easy-to-understand category in agreement with the actual waste operation services being carried out.

### **2.4 Utility of Improvements**

IPAAM will plot out appropriate WSC management in accordance with the database through environmental licensing approval and renewal based on the new category, and provide guidance to waste generators to select appropriately qualified WSCs, thus promoting appropriate industrial waste management.

### **2.5 Basic Vision of Category Improvement**

#### **2.5.1 Make the category in agreement with actual operations as easy to use and understand as possible.**

However, upon carrying out appropriate waste management, will cover all necessary items.

#### **2.5.2 Major Classification**

First separate municipal and industrial waste from actual business operations

#### **2.5.3 Sub-Classification: into 4 categories of industrial waste operation**

- (1) Collection and Transportation (including transfer and temporary storage)
- (2) Intermediary Treatment
- (3) Recycling (separation as well as waste reuse business)
- (4) Final Disposal

#### **2.5.4 Types of industrial waste handled: into 3 classes**

Industrial waste (IW) is waste discharged from factories (obtained environmental license?), divided into three classes:

Class I (HIW), Class II-A (Non-HIW & Non-Inert), Class II-B (Non-HIW & Inert)

#### **2.5.5 Category Items**

- A. (2 Business types: Industrial waste, Municipal waste)
- B. (4 Operation types: collection and transportation, intermediate treatment, recycling, final disposal)
- C. (3 Waste classes: Hazardous; Non-Hazardous & Non-Inert; Non-Hazardous & Inert)

#### 2.5.6 Category Assembly

In the following order: A→B→C. Significance put on business type (Municipal waste, Industrial waste)

#### 2.6 Japan Operation License Categories

First, municipal and industrial wastes are categorized, and industrial waste is divided by “collection and transportation” and “disposal”; similarly, other specially managed industrial wastes (hazardous waste) are also divided by “collection/transportation” and “disposal”.

The scope of work is written on the application form (e.g. types of IW handled; intention of transfer, storage, etc.; disposal method)

Business practices are controlled by separately established regulations

#### 2.7 Recommended Additional Application Items

Addition of the minimum items necessary to more or less understand the content of business activities.

- (1) 3401 List of Vehicle Used, Picture, Location of Parking, Existence of Transfer, Temporary Storage, and if so, Location, etc.
- (2) 3402 Explanation of Facility (location, types of waste, disposal method, disposal capability, etc.)
- (3) 3403 Explanation of kind of recycling, explanation of facility (location, type of waste, disposal method, disposal capability, etc)
- (4) 3404 Explanation of facility (location, type of waste, capacity of facility, etc.)

## 2.8 Recommended form

### 2.8.1 Transport form

OPERATION LICENSE TRANSPORT					
<b>1. General information</b>					
Company / Individual:					
CNPJ / CPF:		State Registration N. (SEFAZ-AM):			
Mail address					
Suburb:		Municipality:		ZIP:	
Phone:		Fax:			
E-mail:					
Representative:		Job-Title:			
N. of employees:	Administration		Operation and Maintenance		
Area	Total (m²)		Site (m²)		
<b>2. TYPE OF LICENSE</b>					
Modality:		( ) Operation License – OL / ( ) Renewal:			
IPAAM Register N.:		Process N.:		License Code	
Activity					
Initial Date:		Expiration Date:		Validity of this license:	
Polluting/Degrading Potential			Size:		
This license has restrictions:					
Location of the Company:					
Geographic Coordinates:	Latitude:		Longitude:		
Name of the Representative					
Phone:					
Name of the Technical Management Advisor (IPAAM):					
Name of the President-Director (IPAAM):					
<b>3. Type of Waste Transportation License</b>					
A	Transportation of non-hazardous industrial wastes				
<b>4. List of Restrictions and/or conditions for the validity of this license</b>					
1. Restrictions 1					
2. Restrictions 2					
3. Restrictions 3 etc.					
<b>4. List of the transportation vehicles</b>					
N.	Plate n.	Make	Model	Load capacity	Obs. (Picture)
1					
2					
3					

## 2.8.2 Treatment

### OPERATION LICENSE TREATMENT

1. General information			
Company / Individual:			
CNPJ / CPF:	State Registration N. (SEFAZ-AM):		
Mail address:			
Suburb:	Municipality:	ZIP:	
Phone:	Fax:		
E-mail:			
Representative:		Job-Title:	
N. of employees:	Administration	Operation and Maintenance	
Area	Total (m <sup>2</sup> )	Site (m <sup>2</sup> )	

2. TYPE OF LICENSE			
Modality:	( ) Operation License – OL / ( ) Renewal:		
IPAAM Register N.:	Process N.	License Code	
Activity			
Initial Date:	Expiration Date:	Validity of this license:	
Polluting/Degrading Potential		Size:	
This license has restrictions:			
Location of the Company:			
Geographic Coordinates:	Latitude:	Longitude:	
Name of the Representative			
Phone:			
Name of the Technical Management Advisor (IPAAM):			
Name of the President-Director (IPAAM):			

3. Type of Waste Treatment License			
Type of Waste		Type of Treatment	
Code	Description	Code	Description
A	Treatment of non-hazardous industrial wastes	T01	Incinerator

ID	Description
T01	Incinerator
T02	Incinerator with chamber
T05	Outdoor burning
T06	Detonation
T07	Oxidation of cyanides
T08	Chemical encapsulation/fixture or solidification
T09	Chemical oxidation
T10	Precipitation
T11	Detoxification
T12	Neutralization
T13	Adsorption
T15	Biologic treatment
T16	Composting
T17	Drying
T18	Land farming
T19	Thermal plasma
T34	Other treatments (specify)

4. List of Restrictions and/or condition for the validity of this license
1. Restrictions 1
2. Restrictions 2
3. Restrictions 3 etc.

### 2.8.3 Recycle form

#### OPERATION LICENSE RECYCLING

1. General Information			
Company / Individual:			
CNPJ / CPF:	State Registration N. (SEFAZ-AM):		
Mail address:			
Suburb:	Municipality:	ZIP:	
Phone:	Fax:		
E-mail:			
Representative:		Job-Title:	
N. of employees:	Administration	Operation and Maintenance	
Area	Total (m²)	Site (m²)	

2. TYPE OF LICENSE			
Modality:	( ) Operation License – OL / ( ) Renewal:		
IPAAM N.:	Process N.	License Code	
Activity			
Initial Date:	Expiration Date:	Validity of this license:	
Polluting/Degrading Potential	Size:		
This license has restrictions:			
Location of the Company:			
Geographic Coordinates:	Latitude:	Longitude:	
Name of the Representative			
Phone:			
Name of the Technical Management Advisor (IPAAM):			
Name of the President-Director (IPAAM):			

3. Type of Wastes Recycling License			
Type of Waste		Type of Recycling	
Code	Description	Code	Description
A	Non-hazardous industrial wastes	T01	Incinerator

ID	Description
R01	Use in industrial oven (except in heating ovens)
R02	Use in boiler
R03	Co-processing in cement ovens
R04	Blending of wastes
R05	Formulation of micronutrients
R06	Incorporation in agricultural soil
R07	Fertilization and irrigation
R08	Animal reaction
R09	Reprocessing of solvents
R10	Re-refining of oil
R11	Reprocessing of oil
R12	Scrap iron collector
R13	On-site reuse/recycling/recovery
R99	Other forms of reuse/recycling/recovery

4. List of Restrictions and/or condition for the validity of this license
1. Restrictions 1
2. Restrictions 2
3. Restrictions 3 etc.

#### 2.8.4 Final Disposal form

### OPERATION LICENSE FINAL DISPOSAL

1. General Information			
Company / Individual:			
CNPJ / CPF:	State Registration N. (SEFAZ-AM):		
Mail address:			
Suburb:	Municipality:	Suburb:	
Phone:	Fax:		
E-mail:			
Representative:		Job-Title:	
N. of employees:	Administration	Operation and Maintenance	
Area	Total (m²)	Site (m²)	

2. MODALIDADE DA LICENÇA			
Modality:	( ) Operation License – OL / ( ) Renewal:		
IPAAM N.:	IPAAM N.:	IPAAM N.:	
Activity			
Initial Date:	Expiration Date:	Validity of this license:	
Polluting/Degrading Potential	Porte:		
This license has restrictions:			
Location of the Company:			
Geographic Coordinates:	Latitude:	Longitude:	
Name of the Representative			
Phone:			
Name of the Technical Management Advisor (IPAAM):			
Name of the President-Director (IPAAM):			

3. Type of Waste Final Disposal License			
Type of Waste		Type of Recycling	
Code	Description	Code	Description
A	Non-hazardous industrial wastes	T01	Incinerator

ID	Description
B01	Infiltration in the soil
B02	Municipal Landfill
B03	Own Industrial Landfill
B04	Third-parties Industrial Landfill
B05	Municipal Dumping Site
B06	Private Dumping Site
B20	Sewer
B30	Other (specify)

4. List of Restrictions and/or condition for the validity of this license	
1.	Restrictions 1
2.	Restrictions 2
3.	Restrictions 3 etc.

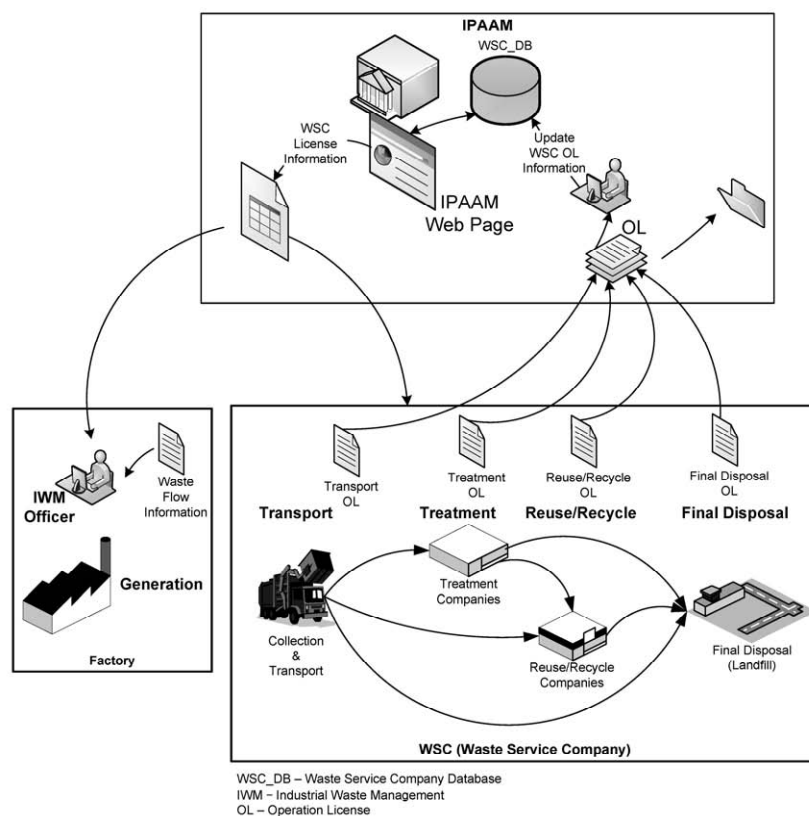


### 3 Waste Service Company (WSC\_DB)

#### 3.1 General scheme of WSC\_DB

As shown in the next figure, the WSC\_DB will operate within next steps:

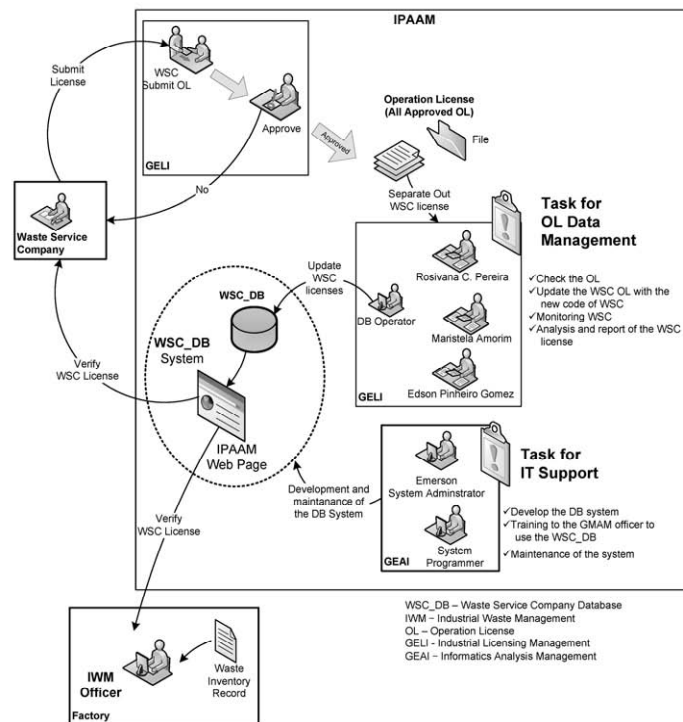
- The WSC officer will apply for new WSC's operation license.
- The IPAAM will check and after approved the OL will update the information in the WSC\_DB and the licensed WSC information will updated in the IPAAM Web Page and will available for IWM officer of the factory and other who required this information.
- The IWM officer of the factory can search the WSC by transport, treatment, recycling and final disposal.



### 3.2 General Scheme for implementation of the WSC\_DB

As shown in the next figure to implement a WSC\_DB, IPAAM establish a group of human resources (GMAN) and support of the IT department (GEAI). The GELI department will check and approve the OL of the WSC, and then GMAN will update the information of WSC's OL in the WSC\_DB.

- The WSC will submit the new WSC's OL to the IPAAM
- The GELI department will receive the OL of the WSC and will check the information, and after approved the OL the DB operator will update the information of the WSC's OL in the WSC\_DB and then the system will automatically updated this information in the IPAAM web site and will be available for the public
- The IWM officer of the factories can check the information of the licensed WSC



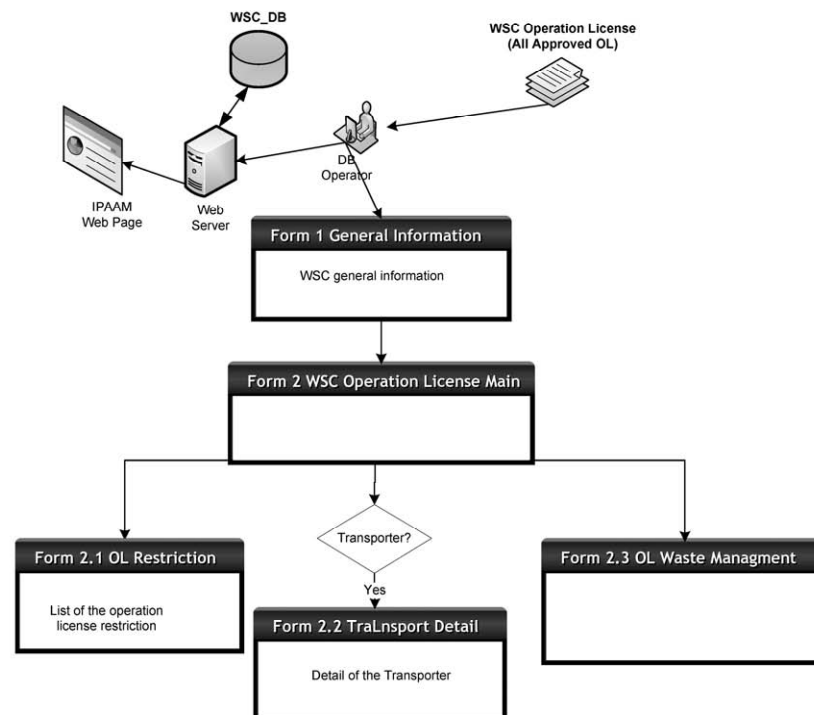
### 3.3 WSC\_DB User guide

### 3.4 Information needed for update waste inventory

- Approved WSC OL with new code

### 3.5 Diagram of the WSC\_DB system

- In the GELI after the OL will approved, the DB operator will update the WSC license information in to the WSC\_DB.
- The WSC OL will update in to the IPAAM web site, and will available for all.



### 3.5.1 F1. General Information

Field	Data	Remark
<i>ID_EmpresaPSR</i>	1	
<i>CNPJ:</i>	04.025.466/0001-00	
<i>State Registration</i>	04.167.721-8	
<i>Company Name</i>	Empresa 1	
<b>Mail Address:</b>		
<i>Street/n°:</i>		
<i>Suburb/District:</i>		
<i>Municipality:</i>		
<i>ZIP:</i>		
<i>Phone:</i>		
<i>Fax:</i>		
<b>Representative Contact:</b>		
<i>Name:</i>	Nome 1	
<i>Job Title:</i>		
<i>E-mail:</i>		
<b>Type of Activity:</b>		
<i>Number of employee:</i>	Administration	20
	Operation and maintenance	50
<i>Area:</i>	Total	3000 m2
	Plant	400 m2
<i>Instalkation Date:</i>	10/01/2000	

### 3.5.2 F2 WSC Operation License information

Field	Data	Remark
<b>Information generated by the system</b>		
ID_Licenca		
ID_EmpresaPSR		
CNPJ	04.025.466/0001-00	
Operation license No	354/01-05	
Process No	0257/T/01	
IPAAMRegistration	1012.3001	
WSC License Code	3401 (Collection and Transport)	Select from WSC license code
OL mode code	Operation license	
Type of OL	Renew	New, Renew
Renew	00001	Renew license number
Activity	Transport of NonHW	Activity description
<b>Location of the company:</b>		
Address	Address 1	
Geographic coordinates	Latitude	3°07'44.14" S GPS measure in Degree/Min/Sec
	Longitude	60°00'45.71" W GPS measure in Degree/Min/Sec
<b>Responsible of the WSC</b>		
Name	Nome 1	
Phone	000000000	
Polluting Code	A (Alto)	
Polluting size	M (Medio)	
<b>Validity of this license</b>		
Initial Date	01/01/2010	
Expire date	31/01/2010	
Vality days	365	
Number of restrictions	10	
<b>Information of IPAAM</b>		
Name fo the Technical Manager	Name 1	
Name of the President Director	Name 2	
Observation		

### 3.5.3 F2.1. Operation License Restriction

ID	ID_Licenca	No	Description
1	1	1	Restriction 1
2	1	2	Restriction 2
3	1	3	Restriction 3

### 3.5.4 F2.2. Transport Detail (if Operation License is for transporte)

List of the vehicles used for transport

ID	ID_Licenca	Plate	Mark	Model	Type	Capacity	Picture	Observation
1	1	AAA234	VW	TA340	Compactor	8ton	sim	
1	2							
1	3							

### 3.5.5 F2.3. Operation License Waste Management

Field	Data	Remark
<i>Information generated by the system</i>		
ID_LicencaResiduo		
ID_Licenca		
Code of Type of waste:	B (Non HW)	
Description of the waste	Non HW waste	
Category of WSC	3401 collection and transport	Select from WSC license code table
<i>Category of waste (CONAMA)</i>		
Category code	RI (Industrial waste)	Select from waste category table
Type code	RINP (Non HIW)	Select from waste type table
CONAMA Code	A006 Resíduos de papel e papelão	Select from CONAMA waste code
Capacity per day	500	Capacity of transport, treatment, recycling and final disposal
Observation	Não	

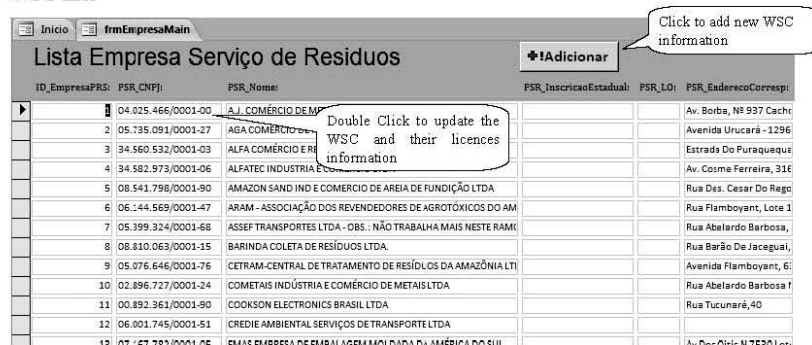
### 3.6 Using WSC\_DB System

#### 3.6.1 Main form

Open the WSC\_DB System and will show the next screen



#### 3.6.2 WSC List



### 3.6.3 Update WSC general information

Update the WSC general information

Click to add new license information

Double click to update license information

### 3.6.4 Update WSC licenses

Update the WSC license general information

Click to update the type of waste of the license

Click to update the restrictions of the license

If the license is for transport, click to update the vehicles use for transport



### 3.7 Search WSC Information on the IPAAM WebPage

The IPAAM web page is linked to the WSC\_DB and all the information about the WSC license will be available in the next page

The screenshot displays the IPAAM (Instituto de Proteção Ambiental do Amazonas) website. At the top, there is a banner with the text "GOVERNO DO ESTADO DO AMAZONAS" and the IPAAM logo. Below the banner, there are navigation tabs: "Principal", "Empresas", and "Fale Conosco". A search bar with the button "Pesquisar" is located on the right. A "MENU" section on the left lists various categories: "Atividades" (with sub-items: "Coleta e Transporte", "Tratamento", "Reciclagem", "Disposição Final"), "Legislação", "Informações Técnicas", "Consultas", and "Links Importantes". A callout box points to the "Atividades" section, stating: "Select the type of licenses and will appear the list of the WSC that have the select type of license". Below the menu, there is a "Bem-vindo" (Welcome) message. Further down, there is a section titled "ACESSO RESTRITO" (Restricted Access) with fields for "Nome" (Name) and "Senha" (Password), a "Clique aqui para se cadastrar" (Click here to register) link, and an "Entrar" (Enter) button. To the right of the login section, there is a JICA logo and text in Portuguese: "ESTUDO PARA O DESENVOLVIMENTO DE UMA SOLUÇÃO INTEGRADA RELATIVA À GESTÃO DE RESÍDUOS INDUSTRIAIS NO PÓLO INDUSTRIAL DE MANAUS" and "Este banco de dados foi desenvolvido dentro do Estudo".

## 4 Tables

### 4.1 WSC license table

ID_CodigoLicencaPSR	ID_ResiduoTipo	ID_CodigoTTRD	Description	Note
3301	RSU	TT	Collection and transport	A (HW), B (Non-HW & Non-Inert), C (Non-HW, Inert)
3302	RSU	TR	Treatment	A (HW), B (Non-HW & Non-Inert), C (Non-HW & Inert)
3303	RSU	RR	Recycling	B (Non-HW & Non-Inert), C (Non-HW & Inert)
3304	RSU	DF	Final disposal	B (Non-HW & Non-Inert), C (Non-HW & Inert)
3401	RSI	TT	Collection and transport	A (HIW), B (Non-HIW & Non-Inert), C (Non-HIW & Inert)
3402	RSI	TR	Treatment	A (HIW), B (Non-HIW & Non-Inert), C (Non-HIW & Inert)
3403	RSI	RR	Recycling	B (Non-HIW & Non-Inert), C (Non-HIW & Inert)
3404	RSI	DF	Final disposal	B (Non-HIW & Non-Inert), C (Non-HIW, Inert)

### 4.2 Polluter category table

ID_CodigoPoluidor	CP Descricao
A	High
G	Big
M	Moderate
P	Small

### 4.3 Polluter size table

ID_CodigoPorte	Size description
G	Big
M	Middle
N	Micro
P	Small

### 4.4 Waste Class Table

ID_CodigoRsClase	Class Description	Observation
A	Hazardous Waste (RP, RIP)	
B	Non Hazardous Waste, Non inert (RNP, RINP, Non-Inert)	
C	Non Hazardous Waste , Inert (RNP, RINP, Inert)	

### 4.5 TTRD category table

ID_CategoriaTTRD	ID_CodigoLicencaPSR	ID_CodigoTTRD	Description	Observation
<b>Final disposal code</b>				
B01	3404	DF	Infiltration in the soil	
B02	3404	DF	Municipal Landfill	
B03	3404	DF	Own Industrial Landfill	
B04	3404	DF	Third-parties Industrial Landfill	
B05	3404	DF	Municipal Dumping Site	
B06	3404	DF	Private Dumping Site	
B20	3404	DF	Sewer	
B30	3404	DF	Other (specify)	
<b>Recycling code</b>				
R01	3403	RR	Use in industrial oven (except in heating ovens)	

#### 4.6 Waste Category

Category	Type	JICA code	Description	No
Industrial Waste	RINP	NH01	Kitchen waste (include waste from animal such as bone, skin, hair)	1
		NH02	Wood	1
		NH03	Paper	1
		NH04	Plastic or polymers and resins	1
		NH05	Textile and fiber	1
		NH06	Animal oil, Vegetable oil	1
	Non-Hazardous industrial waste	NH07	Rubbers and Leather	1
		NH08	Ash/dust from coal-fired power plants, etc.	1
		NH09	Metals and metal alloys such as aluminum, copper, bronze	1
		NH10	Ceramic & Glasses	1
		NH11	Stone, sand or material that have composition of soil such as tile, brick, gypsum, cement	1
		NH12	Mixed waste (This code shall be applied in case wastes are discharged without separation.)	1
		NH13	Others	1
	RIP	HW01	Inorganic acid	1
		HW02	Organic acid	1
		HW03	Alkalies	1
		HW04	Toxic Compounds	1
		HW05	Inorganic Compounds	1

Category	Type	JICA code	Description	No	
		HW06	Other Inorganic	1	
		HW07	Organic Compounds	1	
		HW08	Polymeric Materials	1	
		HW09	Fuel, Oil and Grease	1	
		HW10	Fine Chemicals and Biocides	1	
		HW11	Treatment Sludge	1	
		HW12	Ash from incinerator	1	
		HW13	Dust and Air pollution control (APC) products	1	
		HW14	Other Hazardous substance (besides HW01- HW13)	1	
		HW15	Mixed Waste	1	
		HW16	Hazardous materials from Non-production process	1	
		1. RI Total			
2. RM	Medical waste	Grupo A	RMA1	Group A.1 Biologic	1
		RMA2	Group A.2 Animals	1	
		RMA3	Group A.3 Body part	1	
		RMA4	Group A.4 Patient care etc	1	
		RMA5	Group A.5 Prions	1	
		Grupo B	RMB1	Chemical etc	1
		Grupo C	RMC1	Radioactive waste	1
		Grupo D	RMD1	Common waste	1
		Grupo E	RME1	Piercing or Cutting	1
2. RM Total				9	
3. RC	Constuction waste	Classe A	RCA1	from construction, demolition, refitting and repair of pavement	1
		RCA2	from the construction, demolition refitting and repair of edifications: ceramic components	1	
		RCA3	from manufacturing and/or demolition process of concrete pre-modulated pieces	1	
		Classe B	RCB1	The recyclable waste for other purposes	1
		Classe C	RCC1	Waste which has no economically feasible technology or applications which may allow it to be recycled	1
		Classe D	RCD1	Hazardous waste arisen from construction process, such as paints, solvents, oils and so forth	1
3. RC Total				6	
Total geral				44	

#### 4.6.2 CONAMA's waste category table

Category	Type	CONAMA code	Description	No
1. RI	RINP	A001	Residues of restaurant	1
		A002	Generated residues outside of the industrial process	1
		A003	Residues of variação of plant	1
		A004	Ferrous metal scrap iron	1
		A005	Not ferrous metal scrap iron	1
		A006	Residues of paper and cardboard	1
		A007	Polymerized plastic residues of process	1
		A008	Rubber residues	1
		A009	Residues wooden I contend not toxic substances	1
	Resíduos Industriais não perigosos	A010	Residues of têxteis materials	1
		A011	Not metallic mineral residues	1
		A012	Slag of aluminum casting	1
		A013	Slag of iron production and steel	1
		A014	Slag of brass casting	1
		A015	Slag of zinc casting	1
		A016	Sand of casting	1
		A017	Refractory ceramic residues and material	1
		A018	Solid residues not toxic metal composites	1
		A019	Solid residues of stations of treatment of effluent I contend material biological not toxic	1

Category	Type	CONAMA code	Description	No
		A021	Solid residues of stations of treatment of effluent I contend not toxic substances	1
		A022	Pastosos residues of stations of treatment of effluent I contend not toxic substances	1
		A023	Pastosos residues I contend limy	1
		A024	Bagasse of sugar cane	1
		A025	Fibre glass	1
		A026	Slag of jateamento I contend not toxic substances	1
		A027	Used catalysers I contend not toxic substances	1
		A028	Residues of system of control of not toxic gaseous emission I contend substance	1
		A029	Other not dangerous residues	1
		A099	Salty shavings	1
		A104	Metallic packings	1
		A105	Not ferrous metal packings	1
		A107	Bombonas of plastic not contaminated	1
		A108	Etil acetate residues vinila	1
		A111	Leached ashes of boiler	1
		A117	Glass residues	1
		A199	Foam	1
		A204	Tambores metallic	1
		A207	Plastic films and small packings	1
		A208	Polyurethane residues (PU)	1
		A299	Caleadas shavings of skins	1
		A308	Silt of the caleiro	1
		A399	Atanado leather shavings, remnants	1
		A499	Carnaça	1
		A599	Residues organic of process	1
		A699	Rind of rice	1
		A799	Atanado leather Serragem, bran and dust	1
		A899	Generated residues outside of the industrial process (office, packings, etc.)	1
		A999	Residues of fruits	1
	RIP	C001 C009	Listing 10 - dangerous residues for containing volatile components	1
		D001	Dangerous residues for presenting inflammability	1
		D002	Dangerous residues for presenting corrosively	1
		D003	Dangerous residues for presenting reactivity	1
		D004	Dangerous residues for presenting pathogenicity	1
		D005 D029	Listing 7 of Norm NBR 10004; dangerous residues characterized by the leaching test	1
		D099	Other dangerous residues - to specify	1
			Listing 1 of Norm NBR 10004- admittedly dangerous residues - Classroom 1, of	
		F001 F0301	not-specific sources	1
		F100	Bifenilas Policloradas - PCB's. Packings contaminated with PCBs also transforming and capacitors	1
		F102	Residue of catalysers not specified in Norm NBR 10.004	1
Resíduos Industriais perigosos		F103	Deriving residue of industrial laboratories (chemical products) not specified in Norm NBR 10.004	1
		F104	Not specified contaminated empty packings in Norm NBR 10.004	1
		F105	Solvent contaminated (to specify solvent and the main contaminante)	1
		F130	Used lubricant oil	1
		F230	Hydraulic fluid	1
		F330	Cutting and hauling oil	1
		F430	Used contaminated oil in isolation or cooling	1
		F530	Oil wastes from the water-oil separating system	1
		K001 K209	Listing 2 of Norm NBR 10004- admittedly dangerous residues of specific sources	1
		K053	Remaining portions and you splodge of inks and pigments	1
		K078	Residue of cleanness with solvent in the manufacture of inks	1
		K081	Silt of ETE of the production of inks	1
		K193	Shavings of leather tanned to chromium	1

Category	Type	CONAMA code	Description	No	
		K194	Leather Serragem and dust I contend chromium	1	
		K195	Silt of stations of treatment of effluent of tanning to chromium	1	
		K203	Residues of laboratories of research of illnesses	1	
		K207	It splodges of the used oil re-refining (it splodges acid)	1	
		P001 P123	Listing 5 of Norm NBR 10004 - dangerous residues for containing toxic substances acutely	1	
		U001 U246	Listing 6 of Norm NBR 10004- dangerous residues for containing toxic substances	1	
1. RI Total				77	
2. RM	Grupo_A	RMA1	Group A.1 Biologic	1	
Resíduos médicos		RMA2	Group A.2 Animals	1	
		RMA3	Group A.3 Body part	1	
		RMA4	Group A.4 Patient care etc	1	
		RMA5	Group A.5 Prions	1	
		Grupo_B	RMB1	Chemical etc	1
		Grupo_C	RMC1	Radioactive waste	1
		Grupo_D	RMD1	Common waste	1
	Grupo_E	RME1	Piercing or Cutting	1	
2. RM Total				9	
3. RC	Classe_A	RCA1	from construction, demolition, refitting and repair of pavement	1	
Resíduo de construção		RCA2	from the construction, demolition refitting and repair of edifications: ceramic components	1	
		RCA3	from manufacturing and/or demolition process of concrete pre-modulated pieces	1	
		Classe_B	RCB1	The recyclable waste for other purposes	1
		Classe_C	RCC1	Waste which has no economically feasible technology or applications which may allow it to be recycled	1
		Classe_D	RCD1	Hazardous waste arisen from construction process, such as paints, solvents, oils and so forth	1
	3. RC Total				6
Grand Total				92	

#### 4.6.3 Corresponding Waste category table JICA to CONAMA

Category	Type	JICA code		CONAMA code	
		Code	Description	Code	Description
1. RI	RINP	NH01	Kitchen waste (include waste from animal such as bone, skin, hair)	A001	Residues of restaurant
				A024	Bagasse of sugar cane
				A499	Canapa
				A599	Residues organic of process
				A699	Rind of rice
				A999	Residues of fruits
				A009	Residues wooden I contend not toxic substances
				A006	Residues of paper and cardboard
				A007	Polymerized plastic residues of process
				A107	Bombonas of plastic not contaminated
		NH04	Plastic or polymers and resins	A108	Etil acetate residues vinila
				A207	Plastic films and small packings
				A208	Polyurethane residues (PU)
				A010	Residues of têxteis materials
		NH05	Textile and fiber	Z999	?
		NH06	Animal oil, Vegetable oil	A008	Rubber residues
		NH07	Rubbers and Leather	A299	Caleadas shavings of skins
				A399	Atanado leather shavings, remnants
				A111	Leached ashes of boiler
		NH08	Ash/dust from coal-fired power plants, etc.	A004	Ferrous metal scrap iron
		NH09	Metals and metal alloys such as aluminum, copper, bronze	A005	Not ferrous metal scrap iron
				A011	Not metallic mineral residues
				A012	Slag of aluminum casting
				A013	Slag of iron production and steel

Category	Type	JICA code		CONAMA code	
		Code	Description	Code	Description
				A014	Slag of brass casting
				A015	Slag of zinc casting
				A016	Sand of casting
				A104	Metallic packings
				A105	Not ferrous metal packings
				A204	Tambores metallic
	NH10		Ceramic & Glasses	A017	Refractory ceramic residues and material
				A025	Fibre glass
				A117	Glass residues
				A799	Atanado leather Serragem, bran and dust
	NH11		Stone, sand or material that have composition of soil such as tile, brick, gypsum, cement	Z999	?
	NH12		Mixed waste (This code shall be applied in case wastes are discharged without separation.)	A002	Generated residues outside of the industrial process
	NH13		Others	A003	Residues of variação of plant
				A018	Solid residues not toxic metal composites
				A019	Solid residues of stations of treatment of effluent I contend material biological not toxic
				A021	Solid residues of stations of treatment of effluent I contend not toxic substances
				A022	Pastosos residues of stations of treatment of effluent I contend not toxic substances
				A023	Pastosos residues I contend limy
				A026	Slag of jateamento I contend not toxic substances
				A027	Used catalysers I contend not toxic substances
				A028	Residues of system of control of not toxic gaseous emission I contend substance
				A029	Other not dangerous residues
				A099	Salty shavings
				A199	Foam
				A308	Silt of the calceiro
				A899	Generated residues outside of the industrial process (office, packings, etc.)
RIP	HW01		Inorganic acid	D002	Dangerous residues for presenting corrosively
				D003	Dangerous residues for presenting reactivity
				K207	It splodges of the used oil re-refining (it splodges acid)
	HW02		Organic acid	D002	Dangerous residues for presenting corrosively
				D003	Dangerous residues for presenting reactivity
	HW03		Alkalis	D002	Dangerous residues for presenting corrosively
				D003	Dangerous residues for presenting reactivity
	HW04		Toxic Compounds	F001_F0301	Listing 1 of Norm NBR 10004- admittedly dangerous residues - Classroom 1, of not-specific sources
				F103	Deriving residue of industrial laboratories (chemical products) not specified in Norm NBR 10.004
				F130	Used lubricant oil
				F230	Hydraulic fluid
				F330	Cutting and hauling oil
				F430	Used contaminated oil in isolation or cooling
				F530	Oil wastes from the water-oil separating system
				K001_K209	Listing 2 of Norm NBR 10004- admittedly dangerous residues of specific sources
				K193	Shavings of leather tanned to chromium
				K194	Leather Serragem and dust I contend chromium
				K195	Silt of stations of treatment of effluent of tanning to chromium
	HW05		Inorganic Compounds	D005_D029	Listing 7 of Norm NBR 10004: dangerous residues characterized by the leaching test
	HW06		Other Inorganic	D005_D029	Listing 7 of Norm NBR 10004: dangerous residues

Category	Type	JICA code		CONAMA code	
		Code	Description	Code	Description
HW07	Organic Compounds				characterized by the leaching test
		D003			Dangerous residues for presenting reactivity
		F001_F0301			Listing 1 of Norm NBR 10004- admittedly dangerous residues - Classroom 1, of not-specific sources
		F100			Bifenilas Policloradas - PCB's. Packings contaminated with PCBs also transforming and capacitors
		F105			Solvent contaminated (to specify solvent and the main contaminante)
		F130			Used lubricant oil
		F230			Hydraulic fluid
		F330			Cutting and hauling oil
		F430			Used contaminated oil in isolation or cooling
		F530			Oil wastes from the water-oil separating system
		K001_K209			Listing 2 of Norm NBR 10004- admittedly dangerous residues of specific sources
		K053			Remaining portions and you spodge of inks and pigments
		K078			Residue of cleanliness with solvent in the manufacture of inks
		K081			Silt of ETE of the production of inks
		P001_P123			Listing 5 of Norm NBR 10004 - dangerous residues for containing toxic substances acutely
HW08	Polymeric Materials	D001			Dangerous residues for presenting inflammability
HW09	Fuel, Oil and Grease	D001			Dangerous residues for presenting inflammability
		K207			It spoldges of the used oil re-refining (it spoldges acid)
HW10	Fine Chemicals and Biocides	D001			Dangerous residues for presenting inflammability
		D004			Dangerous residues for presenting pathogenicity
		D005_D029			Listing 7 of Norm NBR 10004: dangerous residues characterized by the leaching test
		F103			Deriving residue of industrial laboratories (chemical products) not specified in Norm NBR 10.004
		K203			Residues of laboratories of research of illnesses
HW11	Treatment Sludge	D005_D029			Listing 7 of Norm NBR 10004: dangerous residues characterized by the leaching test
		K081			Silt of ETE of the production of inks
HW12	Ash from incinerator	Z999			?
HW13	Dust and Air pollution control (APC) products	Z999			?
HW14	Other Hazardous substance (besides HW01-HW13)	C001_C009			Listing 10 - dangerous residues for containing volatile components
		D001			Dangerous residues for presenting inflammability
		D004			Dangerous residues for presenting pathogenicity
		D099			Other dangerous residues - to specify
		F102			Residue of catalysers not specified in Norm NBR 10.004
		F104			Not specified contaminated empty packings in Norm NBR 10.004
		U001_U246			Listing 6 of Norm NBR 10004- dangerous residues for containing toxic substances
HW15	Mixed Waste	Z999			?
HW16	Hazardous materials from Non-production process	Z999			?
2. RC Classe A	RCA1	from construction, demolition, refitting and repair of pavement	RCA1		from construction, demolition, refitting and repair of pavement
	RCA2	from the construction, demolition refitting and repair of edifications: ceramic components	RCA2		from the construction, demolition refitting and repair of edifications: ceramic components
	RCA3	from manufacturing and/or demolition process of concrete pre-modulated pieces	RCA3		from manufacturing and/or demolition process of concrete pre-modulated pieces



Category	Type	JICA code		CONAMA code	
		Code	Description	Code	Description
	Classe_ B	RCB1	The recyclable waste for other purposes	RCB1	The recyclable waste for other purposes
	Classe_ C	RCC1	Waste which has no economically feasible technology or applications which may allow it to be recycled	RCC1	Waste which has no economically feasible technology or applications which may allow it to be recycled
	Classe_ D	RCD1	Hazardous waste arisen from construction process, such as paints, solvents, oils and so forth	RCD1	Hazardous waste arisen from construction process, such as paints, solvents, oils and so forth
3. RM	Grupo_ A	RMA1	Group A.1 Biologic	RMA1	Group A.1 Biologic
		RMA2	Group A.2 Animals	RMA2	Group A.2 Animals
		RMA3	Group A.3 Body part	RMA3	Group A.3 Body part
		RMA4	Group A.4 Patient care etc	RMA4	Group A.4 Patient care etc
		RMA5	Group A.5 Prions	RMA5	Group A.5 Prions
	Grupo_ B	RMB1	Chemical etc	RMB1	Chemical etc
	Grupo_ C	RMC1	Radioactive waste	RMC1	Radioactive waste
	Grupo_ D	RMD1	Common waste	RMD1	Common waste
	Grupo_ E	RME1	Piercing or Cutting	RME1	Piercing or Cutting

#### 4.6.4 Corresponding waste category table CONAMA to JICA

Category	Type	CONAMA code		JICA code	
		Code	Description	Code	Description
I. RI	RINP	A001	Residues of restaurant	NH01	Kitchen waste (include waste from animal such as bone, skin, hair)
		A002	Generated residues outside of the industrial process	NH12	Mixed waste (This code shall be applied in case wastes are discharged without separation.)
		A003	Residues of varrição of plant	NH13	Others
		A004	Ferrous metal scrap iron	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A005	Not ferrous metal scrap iron	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A006	Residues of paper and cardboard	NH03	Paper
		A007	Polymerized plastic residues of process	NH04	Plastic or polymers and resins
		A008	Rubber residues	NH07	Rubbers and Leather
		A009	Residues wooden I contend not toxic substances	NH02	Wood
		A010	Residues of têxteis materials	NH05	Textile and fiber
		A011	Not metallic mineral residues	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A012	Slag of aluminum casting	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A013	Slag of iron production and steel	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A014	Slag of brass casting	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A015	Slag of zinc casting	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A016	Sand of casting	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A017	Refractory ceramic residues and material	NH10	Ceramic & Glasses
		A018	Solid residues not toxic metal composites	NH13	Others
		A019	Solid residues of stations of treatment of effluent I contend material biological not toxic	NH13	Others
		A021	Solid residues of stations of treatment of effluent I contend not toxic substances	NH13	Others
		A022	Pastosos residues of stations of treatment of effluent I contend not toxic substances	NH13	Others

Category	Type	CONAMA code		JICA code	
		Code	Description	Code	Description
		A023	Pastosos residues I contend limy	NH13	Others
		A024	Bagasse of sugar cane	NH01	Kitchen waste (include waste from animal such as bone, skin, hair)
		A025	Fibre glass	NH10	Ceramic & Glasses
		A026	Slag of jateamento I contend not toxic substances	NH13	Others
		A027	Used catalysers I contend not toxic substances	NH13	Others
		A028	Residues of system of control of not toxic gaseous emission I contend substance	NH13	Others
		A029	Other not dangerous residues	NH13	Others
		A099	Salty shavings	NH13	Others
		A104	Metallic packings	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A105	Not ferrous metal packings	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A107	Bombonas of plastic not contaminated	NH04	Plastic or polymers and resins
		A108	Etil acetate residues vinila	NH04	Plastic or polymers and resins
		A111	Leached ashes of boiler	NH08	Ash/dust from coal-fired power plants, etc.
		A117	Glass residues	NH10	Ceramic & Glasses
		A199	Foam	NH13	Others
		A204	Tambores metallic	NH09	Metals and metal alloys such as aluminum, copper, bronze
		A207	Plastic films and small packings	NH04	Plastic or polymers and resins
		A208	Polyurethane residues (PU)	NH04	Plastic or polymers and resins
		A299	Caleadas shavings of skins	NH07	Rubbers and Leather
		A308	Silt of the caleiro	NH13	Others
		A399	Atanado leather shavings, remnants	NH07	Rubbers and Leather
		A499	Camaça	NH01	Kitchen waste (include waste from animal such as bone, skin, hair)
		A599	Residues organic of process	NH01	Kitchen waste (include waste from animal such as bone, skin, hair)
		A699	Rind of rice	NH01	Kitchen waste (include waste from animal such as bone, skin, hair)
		A799	Atanado leather Serragem, bran and dust	NH10	Ceramic & Glasses
		A899	Generated residues outside of the industrial process (office, packings, etc.)	NH13	Others
		A999	Residues of fruits	NH01	Kitchen waste (include waste from animal such as bone, skin, hair)
		Z999	?	NH06	Animal oil, Vegetable oil
				NH11	Stone, sand or material that have composition of soil such as tile, brick, gypsum, cement
RIP	C001_C009	Listing 10 - dangerous residues for containing volatile components		HW14	Other Hazardous substance (besides HW01-HW13)
	D001	Dangerous residues for presenting inflammability	HW08	Polymeric Materials	
			HW09	Fuel, Oil and Grease	
			HW10	Fine Chemicals and Biocides	
			HW14	Other Hazardous substance (besides HW01-HW13)	
	D002	Dangerous residues for presenting corrosively	HW01	Inorganic acid	
			HW02	Organic acid	
	D003	Dangerous residues for presenting reactivity	HW03	Alkalis	
			HW01	Inorganic acid	
			HW02	Organic acid	
			HW03	Alkalis	
	D004	Dangerous residues for presenting pathogenicity	HW07	Organic Compounds	
			HW10	Fine Chemicals and Biocides	
			HW14	Other Hazardous substance (besides HW01-HW13)	

Category	Type	CONAMA code		JICA code	
		Code	Description	Code	Description
		D005_D029	Listing 7 of Norm NBR 10004: dangerous residues characterized by the leaching test	HW05	Inorganic Compounds
				HW06	Other Inorganic
				HW10	Fine Chemicals and Biocides
				HW11	Treatment Sludge
		D099	Other dangerous residues - to specify	HW14	Other Hazardous substance (besides HW01-HW13)
		F001_F0301	Listing 1 of Norm NBR 10004- admittedly dangerous residues - Classroom 1, of not-specific sources	HW04	Toxic Compounds
				HW07	Organic Compounds
		F100	Bifenilas Policloradas - PCB's. Packings contaminated with PCBs also transforming and capacitors	HW07	Organic Compounds
		F102	Residue of catalysers not specified in Norm NBR 10.004	HW14	Other Hazardous substance (besides HW01-HW13)
		F103	Deriving residue of industrial laboratories (chemical products) not specified in Norm NBR 10.004	HW04	Toxic Compounds
				HW10	Fine Chemicals and Biocides
		F104	Not specified contaminated empty packings in Norm NBR 10.004	HW14	Other Hazardous substance (besides HW01-HW13)
		F105	Solvent contaminated (to specify solvent and the main contaminante)	HW07	Organic Compounds
		F130	Used lubricant oil	HW04	Toxic Compounds
				HW07	Organic Compounds
		F230	Hydraulic fluid	HW04	Toxic Compounds
				HW07	Organic Compounds
		F330	Cutting and hauling oil	HW04	Toxic Compounds
				HW07	Organic Compounds
		F430	Used contaminated oil in isolation or cooling	HW04	Toxic Compounds
				HW07	Organic Compounds
		F530	Oil wastes from the water-oil separating system	HW04	Toxic Compounds
				HW07	Organic Compounds
		K001_K209	Listing 2 of Norm NBR 10004- admittedly dangerous residues of specific sources	HW04	Toxic Compounds
				HW07	Organic Compounds
		K053	Remaining portions and you splodge of inks and pigments	HW07	Organic Compounds
		K078	Residue of cleanness with solvent in the manufacture of inks	HW07	Organic Compounds
		K081	Silt of ETE of the production of inks	HW07	Organic Compounds
				HW11	Treatment Sludge
		K193	Shavings of leather tanned to chromium	HW04	Toxic Compounds
		K194	Leather Serragem and dust I contend chromium	HW04	Toxic Compounds
		K195	Silt of stations of treatment of effluent of tanning to chromium	HW04	Toxic Compounds
		K203	Residues of laboratories of research of illnesses	HW10	Fine Chemicals and Biocides
		K207	It splodges of the used oil re-refining (it splodges acid)	HW01	Inorganic acid
				HW09	Fuel, Oil and Grease
		P001_P123	Listing 5 of Norm NBR 10004 - dangerous residues for containing toxic substances acutely	HW07	Organic Compounds
		U001_U246	Listing 6 of Norm NBR 10004- dangerous residues for containing toxic substances	HW14	Other Hazardous substance (besides HW01-HW13)
		Z999	?	HW12	Ash from incinerator
				HW13	Dust and Air pollution control (APC) products
				HW15	Mixed Waste
				HW16	Hazardous materials from Non-production

#### 4.7 WSC\_DB tables diagram



#### 4.7.1 Table structure

Table: Categoria TTRD

Name	Type	Size
ID_CategoriaTTRD	Text	3
ID_Codigo_LicencaPSR	Text	4
ID_CodigoTTRD	Text	2
Descricao	Text	80
Observacao	Text	50

Table: Codigo LicencaPSR

Name	Type	Size
ID_Codigo_LicencaPSR	Text	4
ID_ResiduoTipo	Text	3
ID_CodigoTTRD	Text	2
Descricao	Text	100
Nota	Text	50

Table: Codigo ModalidadeLicenca

Name	Type	Size
ID_CodigoModalidade	Text	2
Descricao	Text	25

Table: Codigo Poluidor

Name	Type	Size
ID_CodigoPoluidor	Text	1
CP_Descricao	Text	20

Table: Codigo Porte

Name	Type	Size
ID_CodigoPorte	Text	1
CPorte_Descricao	Text	20

Table: Codigo RsCategoria

Name	Type	Size
ID_CodigoRsCategoria	Text	4
RsCategoria_Descricao	Text	50
RsCategoria_DescricaoEn	Text	50
RsCategoria_Nota	Memo	-

Table: Codigo RsClase

Name	Type	Size
ID_CodigoRsClase	Text	4
RsClase_Descricao	Text	100
Observacao	Memo	-

Table: Codigo RsConama

Name	Type	Size
ID_CodigoRsConama	Text	10
ID_CodigoRsCategoria	Text	4
ID_CodigoRsTipo	Text	10
RsConama_Descricao	Text	100
RsConama_Exemplo	Memo	-
RsConama_DescricaoEn	Text	100
RsConama_ExemploEn	Memo	-
RsConama_Nota	Memo	-

Table: Codigo RsConamaIS

Name	Type	Size
ID_RsConamaIS	Long Integer	4
ID_CodigoRsCategoria	Text	4
ID_CodigoRsTipo	Text	10
ID_CodigoRsIS	Text	4
ID_CodigoRSConama	Text	10
ConamaIS_Obs	Memo	-

Table: Codigo RsIS

Name	Type	Size
ID_CodigoRsIS	Text	4
ID_CodigoRsCategoria	Text	4

ID_CodigoRsTipo	Text	10
RsIS_Descricao	Text	100
RsIS_Exemplo	Memo	-
RsIS_DescricaoEn	Text	100
RsIS_ExemploEn	Memo	-
RsIS_Observacao	Memo	-

Table: Codigo RsTipo

Name	Type	Size
ID_CodigoRsTipo	Text	10
ID_CodigoRsCategoria	Text	4
RsTipo_Descricao	Text	50
RsTipo_DescricaoEn	Text	50
RsTipo_Nota	Memo	-

Table: Codigo TTRD

Name	Type	Size
ID_CodigoTTRD	Text	2
CodigoTTRD_Descricao	Text	20

Table: Empresa PSR

Name	Type	Size
ID_EmpresaPRS	Long Integer	4
PSR_CNPI	Text	20
PSR_Nome	Text	100
PSR_InscricaoEstadual	Text	15
PSR_LO	Text	1
PSR_EnderecoCorresp	Text	100
PSR_Municipio	Text	50
PSR_Bairro	Text	50
PSR_CEP	Text	25
PSR_Fone	Text	50
PSR_Fax	Text	50
PSR_Representante	Text	25
PSR_Cargo	Text	25
PSR_email	Text	100
PSR_FuncionarioOM	Long Integer	4
PSR_FuncionarioAdmin	Long Integer	4
PSR_DataInstalacao	Date/Time	8
PSR_AreaTotal	Long Integer	4
PSR_AreaPlanta	Long Integer	4

Table: Licenca

Name	Type	Size
ID_Licenca	Long Integer	4
ID_EmpresaPSR	Long Integer	4
LIC_CNPI	Text	20
LIC_LONo	Text	15
LIC_ProcessoNo	Text	15
LIC_RegistroIPAAM	Text	10
ID_CodigoLicencaPSR	Text	4
ID_CodigoModalidade	Text	2
LIC_Tipo	Text	15
LIC_Renovacao	Text	30
LIC_Actividade	Text	50
LIC_Localizacao	Text	100
LIC_Latitude	Text	20
LIC_Longitude	Text	20
LIC_Representante	Text	50
LIC_Telefone	Text	50
ID_CodigoPoluidor	Text	1
ID_CodigoPorte	Text	1
LIC_DataInicio	Date/Time	8
LIC_DataExpiracao	Date/Time	8
LIC_ValidadeDias	Long Integer	4
LIC_NroRestricoes	Long Integer	4
LIC_NomeDiretoriaTecnica	Text	50
LIC_NomeDiretorPresidente	Text	50
LIC_Observacao	Memo	-

Table: Licenca Residuo

Name	Type	Size
ID_LicencaResiduo	Long Integer	4
ID_Licenca	Long Integer	4
ID_CodigoRsClase	Text	4
LR_DescricaoResiduo	Text	100
ID_CategoriaTTRD	Text	255
ID_CodigoRsCategoria	Text	4
ID_CodigoRsTipo	Text	4
ID_CodigoRsIS	Text	4
ID_CodigoRsConama	Text	4
LR_CapacidadeTonDia	Long Integer	4
LR_Observacao	Memo	-

Table: Licenca Restricoes

Name	Type	Size
ID_LicencaRestricoes	Long Integer	4
ID_Licenca	Long Integer	4
NroRestricoes	Integer	2
Detalle	Text	100

Table: Licenca Transporte

Name	Type	Size
ID_LicencaTransporte	Long Integer	4
ID_Licenca	Long Integer	4
LT_Placa	Text	15
ID_Marca	Long Integer	4
ID_Modelo	Long Integer	4
ID_Tipo	Long Integer	4
LT_CapacidadCarga	Text	25
LT_Foto	Anchor	-
LT_Observacao	Text	50