



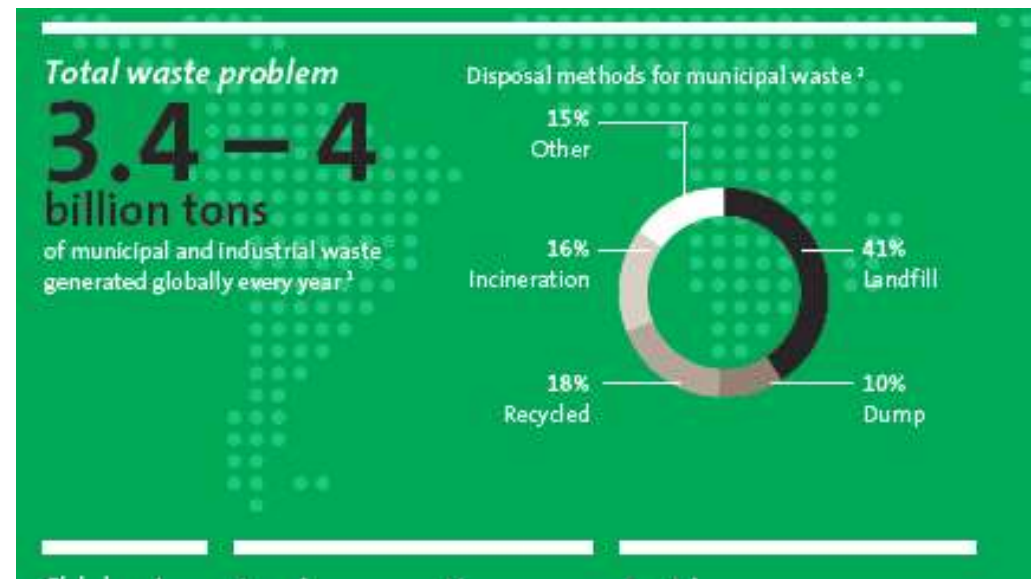
For a zero-waste future

Waste management for a better world



Geocycle - Concept

- Industrial companies generate waste as a by-product of their production process
- Dealing with this waste in a responsible, reliable, sustainable and economically feasible way can be challenging, especially when it comes to hazardous waste
- Geocycle is a *provider of waste management solutions that solves those waste challenges for customers*



Solutions we offer



1 Assessment & consultation



2 Laboratory testing



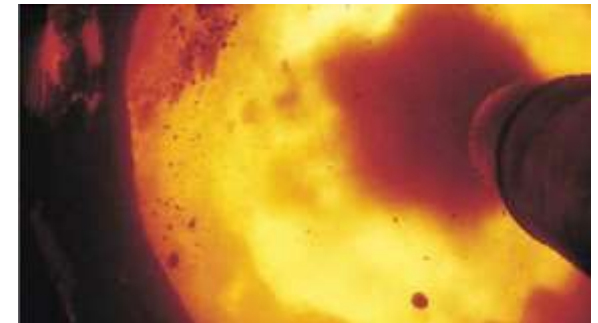
3 Collection & transportation



4 Special services



5 Pre-processing



6 Co-processing

**We improve
the
environmental
performance**

**Reducing
emissions, conserving
natural resources**

**Reaching zero-landfill
targets, enhancing
brand reputation**

Geocycle India

100
employees

57
Million USD
investments

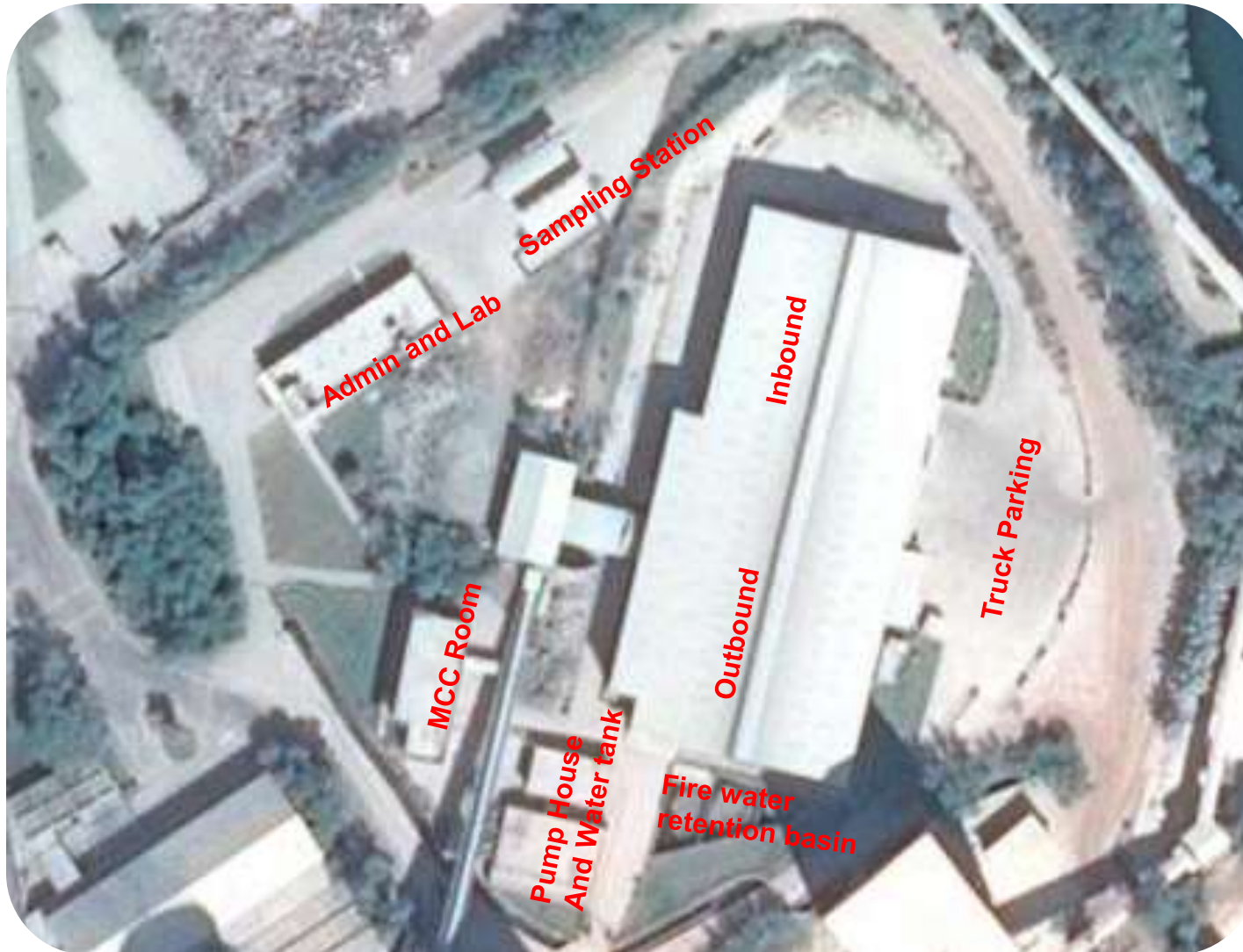
14
co-processing
facilities

6
pre-treatment
facilities

200
customers



Geocycle Kymore: A brief Outline



- Geocycle Kymore Facility commissioned in Dec 2014
- Capacity 90000 TPA

Preprocessing Line



➤ To prevent soil and water contamination, **Geomembrane** (6M x 917M x 2MM) is installed beneath Concrete flooring.

➤ Waste handling capacity 90,000 TPA

- Shredding Circuit consists of hook shredder, FR&OR grade belt conveyors, magnetic separator & disc screen
- Storage & Processing Shed 100m x 40m with 5.5m height concrete walls

Moving Machines

- Hydraulic Arm Handler
- High Dump Wheel Loader
- Mini Skid Loader
- Fork-Lift with drum tilting arrangement
- Scissor Lift

Fire Fighting

- Fire fighting with 1200 m³ water storage and 3 main pumps of 410 cu.m/hr along with one jockey pump
- 597 ESFR Sprinkler, 5 Hose reel, 8 Hydrant post are installed in the facility

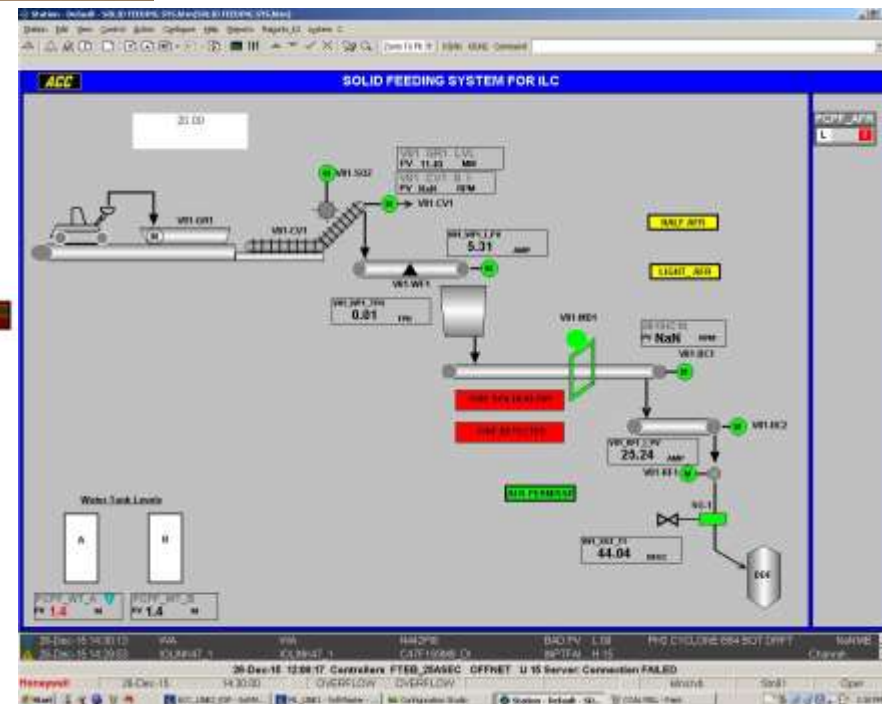
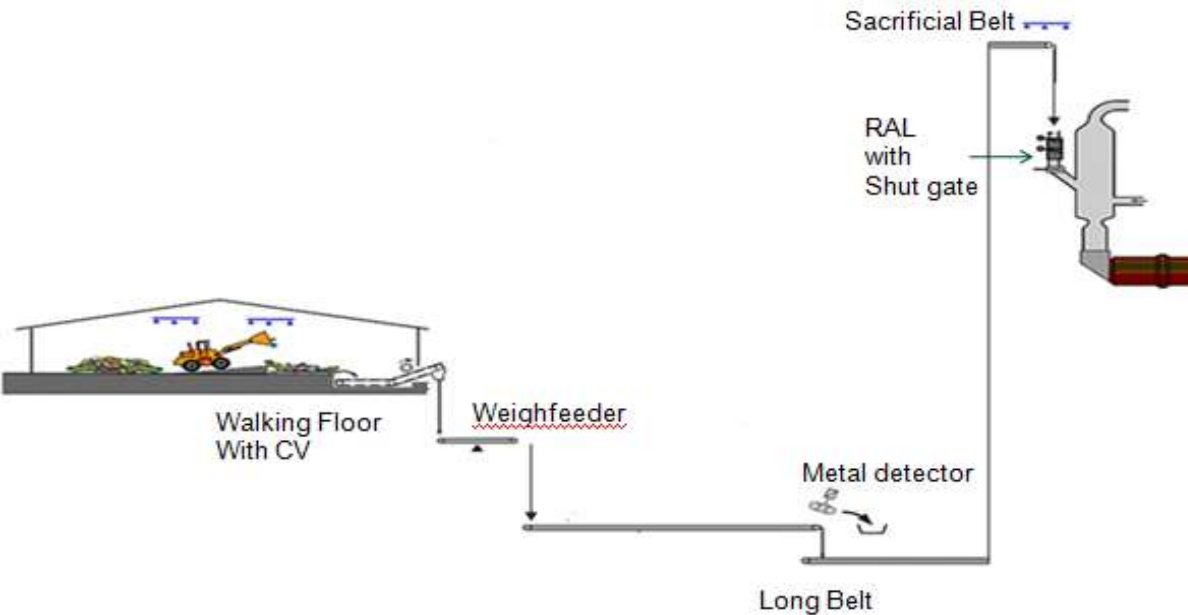
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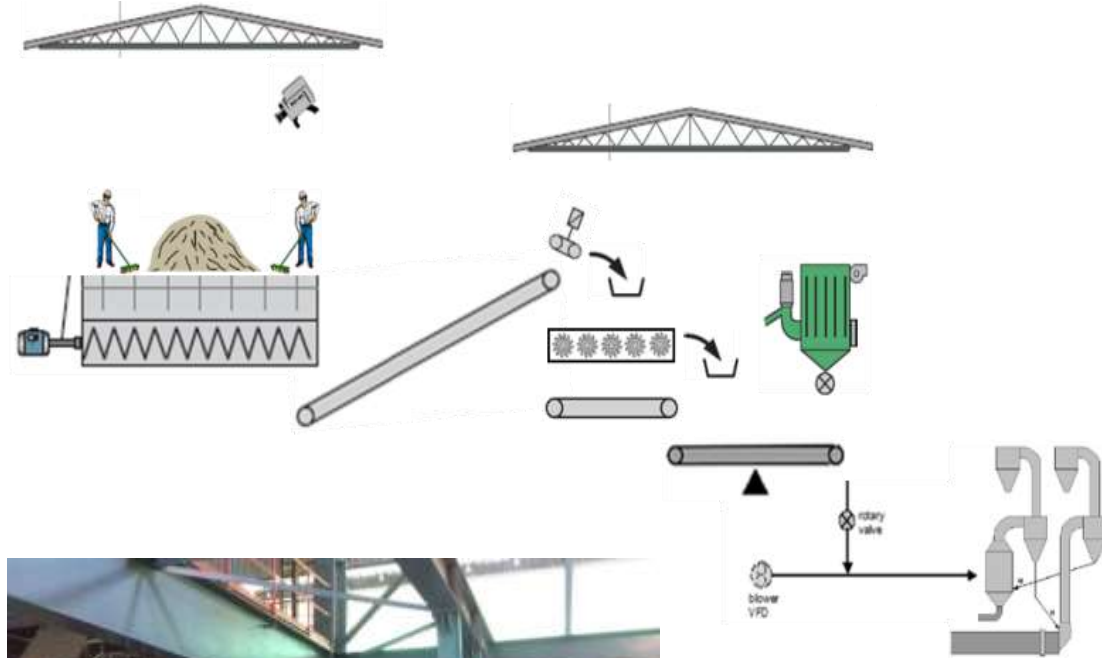
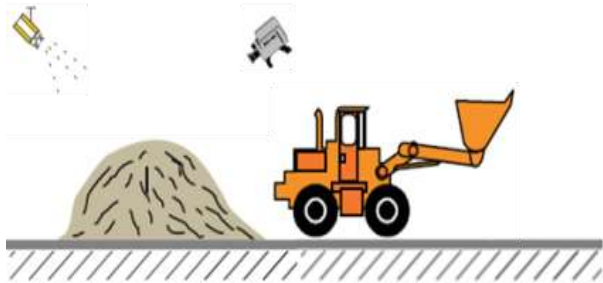
Co-processing Line - 1



- Walking Floor & Chain belt conveyor with stripping wheel/doing drum for volumetric control
- Weigh feeder for gravimetric control
- Long belt conveyor 171m in length
- Sacrificial belt conveyor, Rotary air lock & Safety shut off gate



Agro waste co-processing system – Line 2

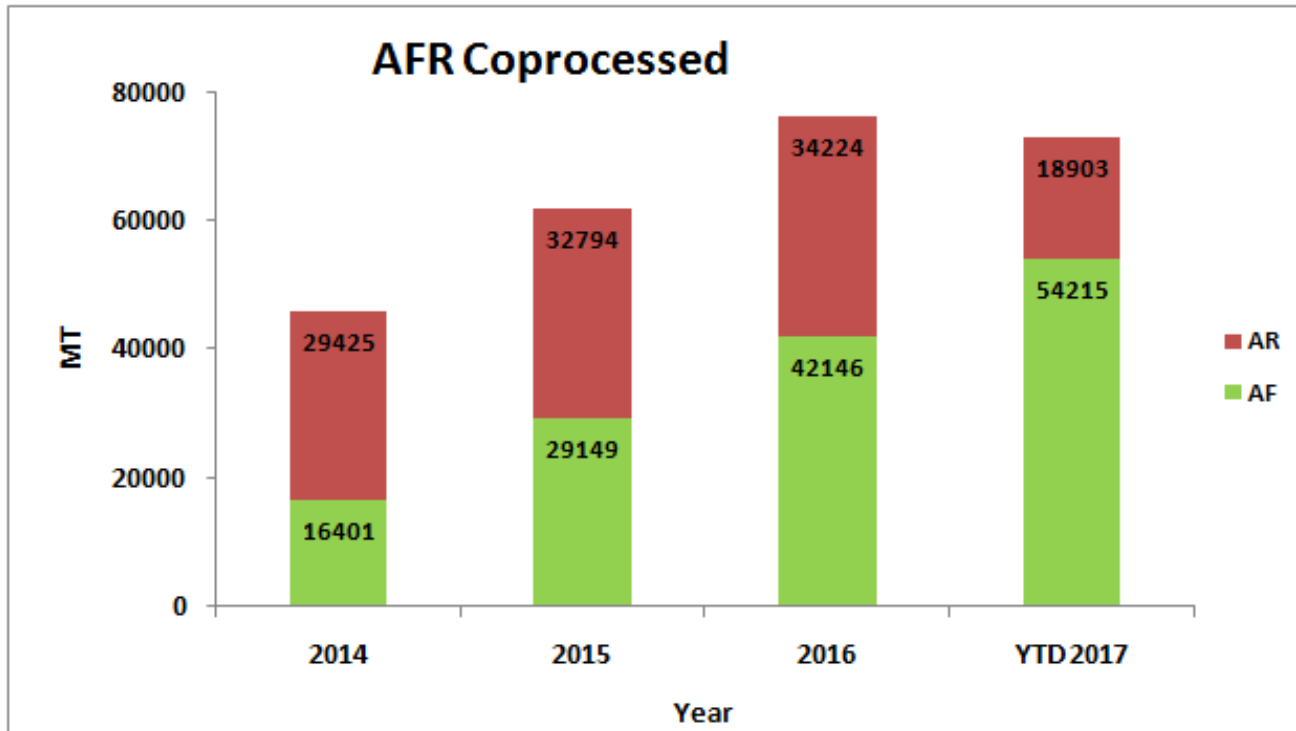


SCF to AF – Preprocessing methodology



- MSW & RDF is difficult to handle without pre-processing
- We need Industrial waste(Hz & NHz) for proper blending
- We are following Geocycle waste acceptance criteria
- We are making good quality of AF by shredding screening, blending, resizing, magnetic & inert segregation
- As per chemical analysis of each waste stream we Design AFR waste mix recipe to optimise AF quality by adding calculative quantity of each waste
- We are procuring rice husk & other agro waste for making homogeneous AF mix
- We are preparing waste profile form for each & every waste before its acceptance

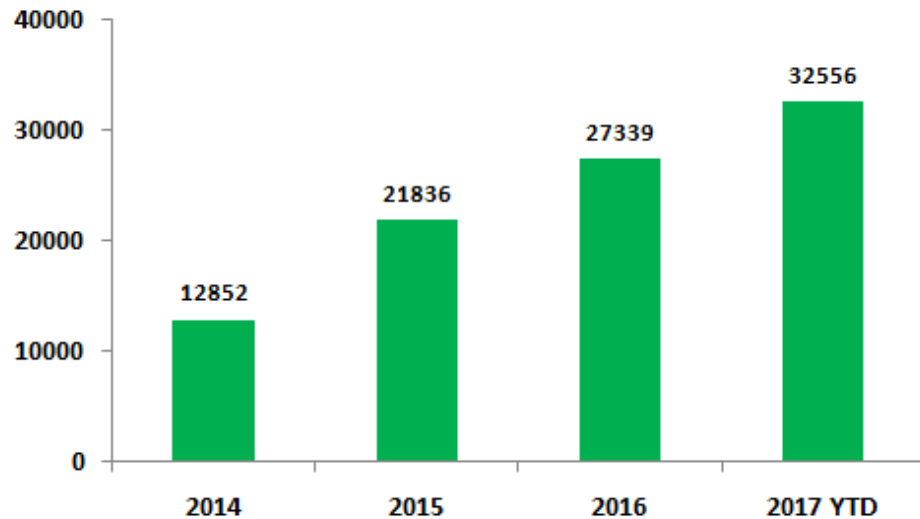
Waste Co-processed in Cement Kiln



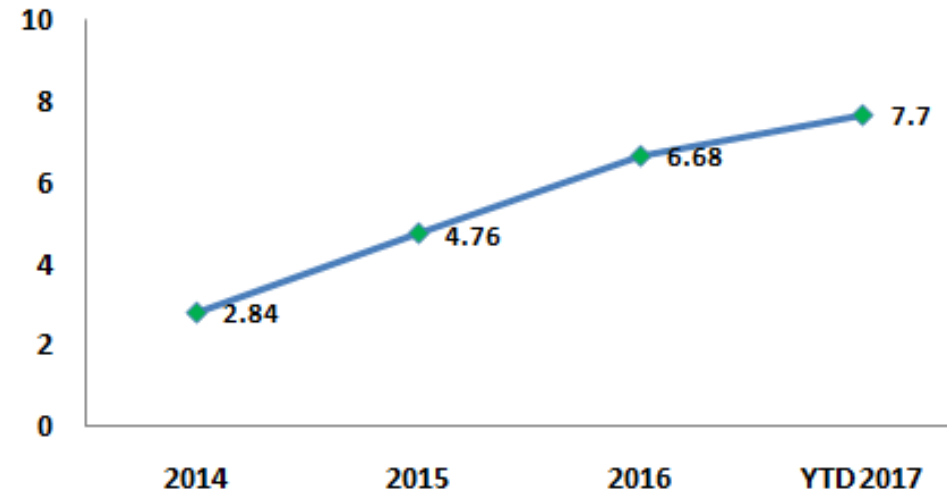
Category of Waste	2016	2017 Nov YTD
Non Haz. Waste	6671.34	3222.55
Haz. Waste	847.62	748.73
Agro waste	18820.88	29719
Plastic waste / MSW	15807.02	20525
Total AF	42146.86	54215.28
Industrial waste AR	2204.63	2728.52
Total IW AFR	44351.49	56943.8

Natural Resources conservation

Traditional Fuel conservation (MT)



Thermal Substitute Rate (TSR) %



- ACC Kymore save 94583 MT of Traditional Fuel from 2014
- Also replaced 151191 MT of Traditional Raw Material from 2014
- TSR % increased from 2.84 % to 7.7 %

Certification and Award recognition



SGS

16th December 2016
HYD/CBE/IMS/LET/61/2016

To Whom It May Concern:

This is to confirm that, ACC Limited at Geocycle India Department, ACC Thane Complex, Teen Hath Naka, LBS Marg, Thane West- 400604, Maharashtra, India; was audited by us, against the standards of ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007 on 24th, 25th, 27th, 28th October and on 03rd & 04th November 2016, with the following scope:

“Receipt, Storage, Handling and Processing of Hazardous and Non Hazardous Waste to Generate Alternative Fuels and Raw Materials.”

Additional sites under the scope :

Site-1: Geocycle India Department, Pre-Processing Facility, PO. Wadi, Dist Gulbarga, Karnataka.

Site-2: Geocycle India Department, Pre-Processing Facility, PO. Kymore, Dist. Katni, Madhya Pradesh.

It is confirmed, that the Management system complies with the requirements of standards of ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007 and Hence the said organization recommended for registration for their scope mentioned above, to our accredited affiliates.

Yours Sincerely

K. Madhusudhan

Certification and Business Enhancement

Head –Technical Management (Non – Food Services)

Project manager – FSC CoC

SGS India Pvt. Ltd.



Trial Burn Conducted at ACC Kymore

Trial Burn Conducted at ACC Kymore Plant

S.No	Company	Name of Waste	Month
1	SRF	Poly Residue + ETP sludge	Nov-06
2	HUL	Trade Reject	Nov-06
3	SRF	Poly Residue	Mar-08
4	ICPE	Non recyclable plastics	Mar-08
5	SRF	Poly Residue	Apr-10
6	KEC	ETP Sludge	Jan-12
7	Godrej	ETP sludge	Jun-12
8	NFIL	DRE Assessment for CFC	Dec-12
9	Diesel Loco shed	Dismantled lube/ fuel oil filter	Jan-13
10	Lanxess Ind.Ltd	Waste Mixed Trial	Dec-15
11	BPCL	Tank Bottom sludge	Feb-16
12	Gov. Opium and Alkoloids Works.	Opium Marc and ETP Sludge	Jun-16

Benefits/Contribution to the Society

- Management of plastic waste problem at **Jabalpur, Katni, Rewa and Satna**
 - ▶ Regular disposal through co-processing at **ACC Kymore Works**
- Co-processing of plastic wastes from municipalities helps in **job creation** for local people
- **Cleaner and greener society**



Disposal of Narcotic materials into Kiln





geocycle