

# Preliminary Information Memorandum

**Disinvestment of 44.26% Equity Shareholding of  
Punjab State Industrial Development Corporation in  
Punjab Alkalies & Chemicals Ltd.**

Directorate of Disinvestment  
Government of Punjab

**JULY 2010**

**GLOBAL ADVISORS**

**IFCI LTD.**



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## 1. CORPORATE INFORMATION

### 1.1 Brief History of Punjab Alkalies & Chemicals Ltd. ( PACL)

PACL was incorporated as a Public Limited Company on December 1, 1975 under the name Punjab Alkalies Limited. The name of the company was subsequently changed to Punjab Alkalies & Chemicals Limited and a Fresh Certificate of Incorporation dated April 19, 1983 consequent on Change of Name was obtained from the Registrar of Companies, Jalandhar. PACL is one of the largest caustic soda manufacturers in the country and has an aggregate capacity of 99,000 TPA. PACL is engaged in the manufacture of Caustic Soda, Liquid Chlorine, Hydrochloric Acid, Calcium Hypochlorite, Sodium Hypochlorite, Hydrogen Gas and Barium sulphate (Barium sulphate plant is non-operational at present).

**Table I –Brief History**

Year	Major Events
1984	Commenced operations with an installed capacity of 37,059 TPA of Caustic Soda and 16,500 TPA of Liquid Chlorine
1987	Caustic Soda Concentration & Flaking Unit Commissioned
1988	Changeover from Graphite Anodes to Dimensionally Stable Metal Anodes and installed an Anode Control and Protection Device
1991	Installed capacity of Caustic Soda Lye and Liquid Chlorine increased to 41,152 TPA and 29,700 TPA respectively
1992	Installed Capacity of Caustic Soda Lye increased to 50,820 TPA
1995	100 TPD, grassroot plant, based on the HOECHST-UHDE Membrane Cell Technology was commissioned. Installed capacity of caustic soda Lye increased to 83,820 TPA and Chlorine to 52,800 TPA respectively.
1998	Conversion of existing 170 TPD Mercury Cell plant to 200 TPD Membrane Cell Plant.
2001	Sodium Hypochlorite plant was installed in 200TPD Membrane cell Plant
2007	Hydrogen Gas Holder was installed in 100 TPD membrane Cell plant.

PACL has been promoted by Punjab State Industrial Development Corporation Limited (PSIDC), a corporation wholly owned by the Govt. of Punjab. Presently, it has facilities for manufacturing 99,000 TPA of caustic soda and various bye-products at Naya Nangal, Punjab. Main products of PACL are caustic soda (lye & flakes), liquid chlorine, hydrochloric acid, hydrogen gas and sodium/calcium hypochlorite.

### 1.2 Registered Office and Plant Location

The Registered and Head Office of PACL is located at Chandigarh and the Plant is located at Naya Nangal in District Ropar, Punjab (India). The location is ideal and is well connected by rail and road. Being so close to the Bhakra Dam, the plant has an assured and continuous good quality power supply - which is a major input for Caustic Soda. The

addresses of its Registered and Head Office, proposed Corporate Office and Plant are given below:

Registered and Head Office	Proposed Corporate Office	Plant
S.C.O. 125-127, Sector 17B, Chandigarh – 160017(INDIA) Phones - 0091-172-2703645/ 2703646/ 2703647,3072500 Fax – 0091-172-2704797	Plot No. 46-50, Sector 31-A, Chandigarh (To be constructed)	Nangal-Una Road Naya Nangal - 140 126 PUNJAB (INDIA) Phones : 0091-1887-220750 to 220754, 220316, 220891 Fax : 0091-1887-220742

### 1.3 Management

Punjab State Industrial Development Corporation Limited (PSIDC), a corporation wholly owned by Govt. of Punjab is the promoter of the PACL. PSIDC has combined role of an Institutional Entrepreneur and a Financial Institution. PSIDC has a good track record in promoting new projects. The day to day management of PACL is looked after by Shri Ajay Kumar Mahajan, Managing Director (Nominee of PSIDC) subject to overall superintendence, direction and control of the Board. The Particulars of the Board of Directors is given as under:

**Table II – Composition of Board of Directors**

S.No.	Name	Promoter/ Independent
1.	Dr. S.S. Channy, IAS Chairman (PSIDC Nominee)	Promoter
2.	Shri Anurag Aggarwal, IAS (PSIDC Nominee)	Promoter
3.	Shri Ajay Kumar Mahajan, Managing Director (PSIDC Nominee)	Promoter
4.	Dr. A. K. Kundra, IAS (Retd.)	Independent
5.	Shri S.K. Sharma	Independent
6.	Shri J.S. Saraon	Independent
7.	Shri D.C. Mehandru	Independent
8.	Shri Rajinder Kumar	IDBI Nominee
9.	Shri O.P.Yadav	IFCI Nominee

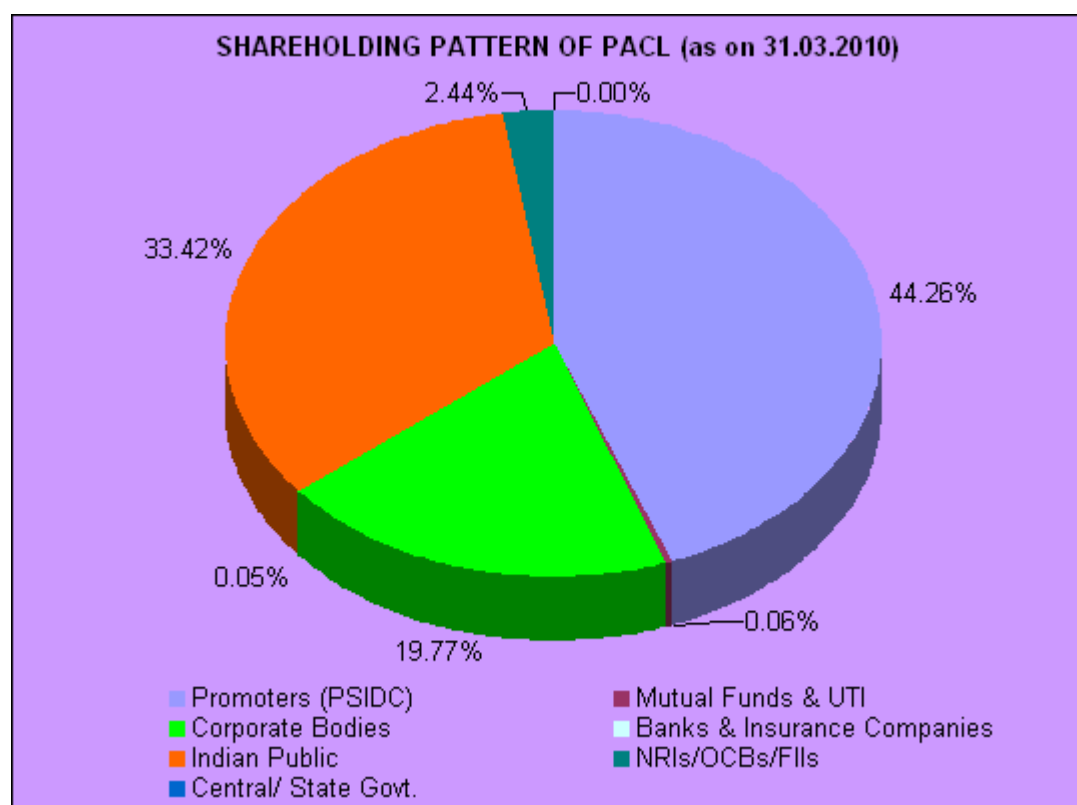
## 1.4 Capital Structure

The authorised capital of PACL is Rs.4,000 lakhs consisting of 4,00,00,000 equity shares of Rs.10/- each. The issued capital consists of 2,05,37,900 equity shares of Rs.10/- each and the paid up capital consists of 2,05,35,550 shares of Rs.10/- each aggregating to Rs.2053.56 lakhs as at 31.03.2009.

**Table III – Shareholding Pattern as on 31.03.2010**

Category	No. of Shares Held	% of Shareholding
Promoters (PSIDC)	9090000	44.26
Mutual Funds & UTI	11700	0.06
Banks & Insurance Companies	9400	0.05
Central/ State Govt.	-	-
NRIs/OCBs/FIIs	501920	2.44
Corporate Bodies	4059001	19.77
Indian Public	6863529	33.42
<b>Total</b>	<b>20535550</b>	<b>100.00</b>

The shareholding pattern of PACL, as on 31.03.2010 was as under:



**Table IV - Public Category Shareholders of PACL holding more than 1% of total shares as on 31.03.2010**

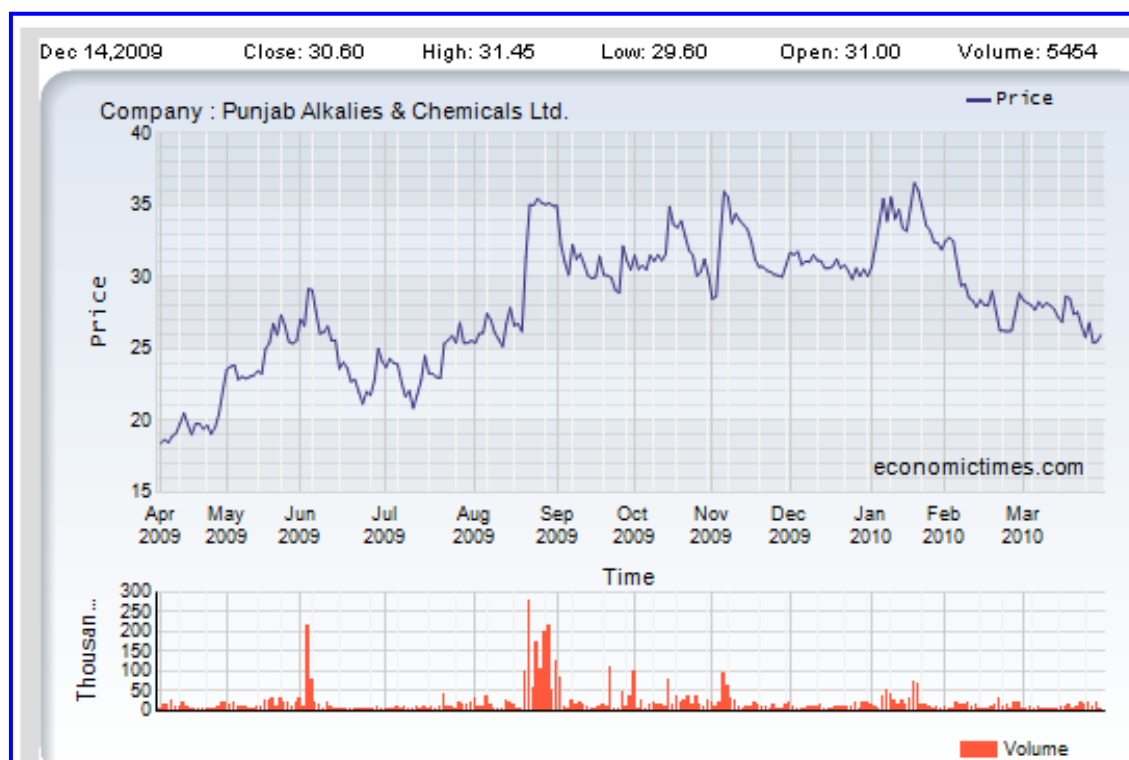
Name of Shareholder	No. of Shares	Percentage
KDS Corporation Private Limited	454,577	2.21%
The Punjab State Co-operative Supply & Marketing Federation Limited	410,000	2.00%
Religare Securities Limited	380,617	1.85%
Alchemist Limited	370,030	1.80%
Amrit Steels Private Limited	320,250	1.56%
Netedge Technosoft Private Limited	305,340	1.49%
<b>Total</b>	<b>2,240,814</b>	<b>10.91%</b>

### 1.5 Listing and Performance of PACL at Stock Market

The Equity shares of PACL are listed on Bombay Stock Exchange Ltd with a Scrip code 506852.

As on March 31, 2010, the Share of PACL (FV Rs.10/-) is quoted at Rs 25.95 (BSE). Last One Month High is Rs.30.75 and Low is Rs.25/- per share (for the period 01.03.2010 to 31.03.2010) whereas 52 week high is Rs 38.35 (on 20.01.2010) and low is Rs 17.70 per share (on 01.04.2009) for the Period 01.04.2009 to 31.03.2010.

#### Index Comparison



**Table V – Highlight of the stock prices of PACL at BSE during the last one year**

Date	Open Price	High Price	Low Price	Close Price	Wt. Avg. Price	No. of Shares	No. of Trades	Total Turnover	Spread (Rs.)	
									H-L	C-O
01/04/09	17.75	19.00	17.70	18.40	18.35	4200	19	77067	1.30	0.65
15/04/09	20.00	21.00	20.00	20.50	20.54	20390	88	418739	1.00	0.50
04/05/09	23.50	24.30	23.30	23.55	23.68	17560	122	415784	1.00	0.05
15/05/09	23.05	24.00	23.05	23.25	23.36	8788	49	205275	0.95	0.20
01/06/09	26.95	27.10	26.00	27.05	26.74	32397	134	866185	1.10	0.10
15/06/09	23.20	25.20	23.20	23.60	23.97	3991	35	95666	2.00	0.40
01/07/09	24.00	24.60	22.90	23.70	23.68	1544	23	36568	1.70	-0.30
15/07/09	24.30	24.55	23.00	24.50	24.22	10011	48	242424	1.55	0.20
03/08/09	25.50	26.40	24.55	25.40	25.15	30388	84	764301	1.85	-0.10
17/08/09	27.35	27.35	26.55	26.60	26.89	15931	61	428357	0.80	-0.75
01/09/09	34.90	35.45	34.10	34.95	35.12	124497	95	4372258	1.35	0.05
15/09/09	29.55	31.00	29.55	30.00	30.32	4446	46	134806	1.45	0.45
01/10/09	32.30	32.35	30.75	31.50	32.06	98329	146	3152149	1.60	-0.80
15/10/09	32.80	32.90	31.00	31.60	31.71	9423	75	298817	1.90	-1.20
03/11/09	29.05	29.80	28.00	28.45	28.88	18645	92	538397	1.80	-0.60
16/11/09	34.00	34.25	33.00	33.35	33.54	8721	92	292522	1.25	-0.65
01/12/09	30.85	32.35	30.20	31.70	31.38	20458	76	641955	2.15	0.85
15/12/09	31.40	31.40	30.50	30.60	30.70	2952	25	90637	0.90	-0.80
04/01/10	30.00	31.10	29.10	30.70	30.42	14770	106	449241	2.00	0.70
15/01/10	33.20	34.00	32.55	33.20	33.47	15846	69	530395	1.45	0.00
20/01/10	38.35	38.35	35.50	36.05	37.62	67972	260	2557285	2.85	-2.30
01/02/10	32.90	33.45	31.55	32.50	32.66	11021	54	359998	1.90	-0.40
15/02/10	27.50	29.45	27.50	28.05	28.24	686	10	19374	1.95	0.55
22/02/10	26.70	26.95	26.15	26.25	26.57	7108	65	188839	0.80	-0.45
02/03/10	28.30	29.00	28.10	28.40	28.45	5,964	59	169,683	0.90	0.10
15/03/10	27.20	27.90	27.20	27.20	27.40	6,396	38	175,244	0.70	0.00
31/03/10	26.00	26.40	25.60	25.95	26.07	3,719	34	96,955	0.80	-0.05

Source: BSE Website.

## 1.6 Plant Details

The caustic soda plant of the company commenced operations in January 1984 originally with an installed capacity of 37,059 TPA of caustic soda. In September 1987, the Company commissioned its Caustic Soda Concentration and Flaking Unit and in 1988, completed the changeover from Graphite Anodes to dimensionally Stable Metal Anodes in all the cells and also installed an Anode Control and Protection Device in its caustic soda plant. In October, 1991, the company commissioned the Capacity Optimisation Project Phase-I, as a result of which the installed capacity of Caustic Soda and Liquid Chlorine increased to 41,152 TPA and 29,700 TPA, respectively. The Capacity Optimisation Project Phase-II was commissioned in end 1992 as a result of which the installed capacity of Caustic Soda further increased to 50,820 TPA. The Company has also implemented the Capacity Optimisation Project Phase-III to ensure continuity of operations. The company had also commissioned a Waste Air Dechlorination (Sodium Hypochlorite) Unit in November 1992. This was not only an additional Pollution Control Measure but also resulted in production of Sodium Hypochlorite – a saleable product.

The Company's 100 Tons Per Day (TPD) Membrane Cell Caustic Soda Plant based on HOECHST-UHDE Membrane Cell Technology at its existing site at Naya Nangal, District Ropar, Punjab commenced commercial production in August, 1995.

With a view to achieve substantial saving in production cost and eliminate mercury pollution, the company also undertook conversion of existing 170 TPD mercury based Plant into 200 TPD membrane cell plant in 1996-97 which was completed in December, 1998.

PACL has two manufacturing units viz. Unit – I & II, both located at Nangal-Una Road, Naya Nangal, District, Ropar, Punjab. Both the units are engaged in manufacture of Caustic Soda, Liquid Chlorine, Hydrochloric Acid and other products such as Sodium Hypochlorite, and Hydrogen. Unit – I & II have a capacity of 100 TPD and 200 TPD respectively. The main plant and machinery includes the following:

**Table VI – Unitwise major Plant and Machinery Details**

Name of the equipment	Unit – I		Unit – II	
	Nos.	Capacity	Nos.	Capacity
Brine Saturation Tanks	2	85CuM X 2	3	60CuM X 3
Precipitation Tanks	2	40CuM X2	2	72.5CuM X 2
Brine Clarification Tanks	1	770CuM	1	2000CuM
Brine Filtration Tank	1	50CuM X 1	1	40CuM X 1
Brine Polishing Tanks	1	50CuM X1	1	57CuM X 1
Ion Exchange Filters	2	60CuM/HR	2	120CuM/HR
Electrolytic Cells	3 electrolyzers of 96 cells		6 electrolyzers of 99 cells each	
Anolyte Tank	1	20CuM X 1	1	40CuM X 1
Catholyte Tank	1	80CuM	1	80 CuM
Chlorine handling capacity of Chlorine Compressor	2	90T/DAY	5	180T/DAY
Chlorine Liquifier	1	90T/day	2	180T/DAY
Caustic Storage Tanks	3	1000CuM X 3	4	500CuM X 3 250CuM X 1
Chlorine Storage Tanks	4	80T X 4	4	90T X 4
Flaking unit	NA	NA	1	50T/DAY
HCL storage unit	2	300 CuM X 2	3	200CuM X 3
Rectifiers	2	22KA, 365 VDC each	3	90 KA , 110 VDC each
DCS	1	CS 3000 3 Screens	1	CS 3000 3 Screens
HCL Furnace	1	40TPD	2	40 TPD
Boilers (H2+ FO fired )	1	5 TPH	2	10 TPH 1.5 TPH
Power Transformers and matching Switch yard Equipments	2 nos, 66/11 KV, 35 MVA each which is common for both the units.			
Sodium Hypochlorite Units	1	1.8 TPD of Cl <sub>2</sub>	1	3.5 TPD of Cl <sub>2</sub>
Caustic Concentration Units	1	10 m <sup>3</sup> / hour	1	20 m <sup>3</sup> /hr
Vapour Absorption Machine	1	120 T/ hr	-	--
Chilled Water System	1	100 T/ hr	5	4x 80 T/ hr 1 x 120 T/ hr
Hydrogen Gas Holder	1	120 Nm <sup>3</sup>	1	200 Nm <sup>3</sup>
DG Set	1	500 KVA	2	2 x 500 KVA
Chlorine Tonners	-	--	2633	900 kg each
Locomotive	SEN-DL-300 HP			



**Aerial View of Plant**

Both the units are co-located at the same site. Unit – I & II are spread over an area of approximately 88.72 acres. While the main manufacturing plants for activities such as Brine saturation/ Precipitation/ Filtration, Electrolysis, etc. are separate for the two units, these units have some common facilities such as stores, administration, dispatches, accounts, quality control, security, etc.



**Caustic Soda Concentration Unit  
& Boiler**



**Chlorine Storage Area**

**Table VII - Capacity Details of PACL**

Product	Unit	Capacities	
		Licensed	Installed
Caustic Soda	MT	99000	99000
Liquid Chlorine	MT	87714	87714
Hydrochloric Acid (100% basis)	MT	73755	39600
Calcium Hypochlorite (Bleach Liquor)	MT	2000	2000
Sodium Hypochlorite	MT	--	990
Hydrogen Gas	Lacs NM <sup>3</sup>	277.20	277.20
Barium Sulphate (non-operational at present)	MT		1000

- (i) The Sodium Hypochlorite Unit is within the overall licensed capacity (2000TPA) of Calcium Hypochlorite.
- (ii) The above capacities have remained the same during the last 5 years

### 1.7 Technical Details

PACL adopted HOECHST-UHDE Membrane Cell Technology in both the Plants which has following advantages :

- (1) Highly energy saving, helps in curtailing the production costs,
- (2) Membrane Cell is environment friendly, which is in line with the Management's commitment to cleaner environment
- (3) Most modern technology for manufacturing caustic soda/chlorine.

PACL in its Unit-I as well as in Unit-II has MEMBRANE CELL TECHNOLOGY with the cell design provided by KRUPP UHDE GmbH, Germany (now known as UHDE GmbH), who are one of the premier technology suppliers in this field

PACL's ISO-9001-2000 certification from Det Norske Veritas (DNV), is a commitment to its customers to manufacture and deliver quality products that meet their own stringent quality requirements. It is a resolve to give its customers total satisfaction.

The Company has implemented an Environmental Management System conforming to ISO 14001:2004 Standard at its Works and the Company's Environment Management System (EMS) has been certified by Det Norske Veritas (DNV).

## Recoating and Remembraning

The company is in the process of replacing the membranes in two electrolyzers of its plant Unit-I and six electrolyzers of its plant Unit-II and getting the Anodes and Cathodes recoated in six electrolyzers of its plant Unit-II. The company has already completed remembraning in two electrolyzers in plant Unit-I and recoating and remembraning in one electrolyser in plant Unit-II.

## 1.8 Raw Material and other Inputs

**Industrial salt (NaCl)** is the main raw material which is purchased by the company and transported from the State of Gujarat by road or rail to the company's plant at Naya Nangal. The requirement of salt is approximately 1,60,000 MT on 100% production basis. The cost of salt being low, the cost of transportation is the main component in the landed cost of salt.

**Other Inputs:** Barium carbonate, Soda Ash, sodium Bisulphite, sulphuric acid, lime etc. are other inputs which are used in the process.

**Power** – Power is one of the major component of the cost of production. The company has a connected power load of **58.876 MW** from Punjab State Electricity Board (PSEB). The contract demand is 40.00 MVA.

The company is entitled to import/ wheel power from any other source under Open Access Policy.

**Water** – The company has an arrangement with the Govt. of Punjab for drawing upto **2 cusecs** of water from the Nangal Dam reservoir. The agreement for the same is executed on yearly basis and the current agreement is valid till 10.05.2011.

**Furnace Oil (FO):** FO along with Hydrogen (which is a co-product) is used in boilers for producing steam.

**Light Diesel Oil (LDO):** LDO alongwith Hydrogen (which is a co-product) is used in the Flaking unit.

## 1.9 Sales and Marketing

The company's products are sold mainly in the states of Punjab, Himachal Pradesh, Haryana, Delhi, Uttar Pradesh, Uttaranchal and Rajasthan and are sold directly to the consumers as also through a network of dealers. Around **40-45%** (FY: 2008-09) of the total sales is direct and the remaining through company's authorised dealers.

The company has been supplying its products to various industries such as paper, soaps & detergents, power, petrochemicals, fertilizers, pharmaceuticals/ chemicals, steel, etc.

### 1.10 Land Details

PACL Plant is located at Naya Nangal, District Ropar, Punjab which is close to State Highway. It is about 3 Km from Nangal Railway Station and about 12 Kms from Bhakra Dam. It is about 2.5 Kms from River Sutlej. It is well connected by rail and road and railway siding facility is available for unloading of raw material, mainly salt. Punjab National Fertilizer & Chemicals Ltd. (“PNFC”) and NFL are located in the vicinity of PACL. The total availability of land including office plot at Chandigarh, as per the details provided by PACL, is given below:-

**Table VIII – Land Details**

Location	Area Available	Ownership Details
Plot No. 46-50, Sector 31-A, Chandigarh	722.085 Sq. Yds	Leasehold for 99 years.
Factory Land – Located in Villages Binewal, Poona, Rampur Sahni (District Ropar)	88.72 acres	Freehold
Old PACL-PNFC Housing Colony – Naya Nangal (Distt. Ropar)	2.674 acres (Area on which PACL Houses/Quarters, etc. are constructed)	The Houses/ Quarters, etc. of PACL in Old PACL-PNFC Housing Colony are built on 2.674 acres of land leased by NFL exclusively to PACL for a period of 50 years since November 1982. The Houses/Quarters, etc. of PNFC in Old PACL-PNFC Housing Colony are built on the land leased by NFL exclusively to PNFC for a period of 50 years since November 1982. NFL had also leased 30.53 acres of land on 50 years lease since November 1982 to PACL and PNFC jointly. The common parks and roads in the Old PACL-PNFC Housing Colony had been constructed on an area of 13.68 acres out of the said land on joint lease. Out of the remaining about 16.85 acres of vacant and unutilised land on joint lease, PACL has utilised 8.61 acres for the purpose of constructing the New PACL Housing Colony.
New PACL Housing Colony – Naya Nangal (Distt. Ropar)	8.61 acres	

### 1.11 Operational Performance

During the Financial year 2008-09, the capacity utilization of PACL was 85%. It is higher in comparison to industry average of about 75% during the same Financial year.

PACL's combined average realization during the year 2008-09 was Rs.29,000 per Electro Chemical Unit (ECU) as against Rs.25,300 per ECU during 2007-08.

**Table IX – Operational Performance of PACL**

(Rs. in Crores)

Parameters	2004-05	2005-06	2006-07	2007-08	2008-09	9 Months ended 31.12.2009 (Provisional) (Unaudited)
Production (MT)	80519	95315	97607	95144	84551	54770
Capacity Utilisation	81%	96%	99%	96%	85%	74%
Gross Revenue	209.46	248.74	238.33	235.40	233.78	127.91
Total Expenditure (excl. Fin. Ch. & Depr.)	162.65	203.81	209.80	204.02	198.92	128.86
PBDIT	46.81	44.93	28.53	31.38	34.86	(-)0.95
Depreciation	12.84	13.43	13.59	12.79	11.87	8.87
Interest	13.77	13.60	12.58	11.40	9.78	5.97
PBT	20.21	17.90	2.36	7.19	13.21	(-)15.79
Tax	-	5.25	1.37	3.25	6.09	(-)2.45
Net Profit	20.21	12.65	0.99	3.94	7.12	(-)13.34
Earning per share (Rs.)	9.87	6.17	0.48	1.92	3.47	(-)6.51

PACL's Profit Before Interest, Depreciation and Tax (PBDIT) increased from Rs.31.38 crores during FY 2007-08 to Rs.34.86 crores for the FY 2008-09. The company has earned a net profit of Rs.7.12 crores during FY 2008-09 which is nearly doubled as compared to corresponding previous year (Rs3.94 crores).

**Table X- Production Performance for the last 6 years**

Product	Unit	Actual Production					
		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Caustic Soda	MT	80519	95315	97607	95144	84551	73362
Liquid Chlorine	MT	55756	68562	71123	68169	57842	48843
Hydrochloric Acid	MT	50670	48744	50143	50788	52585	50432
Calcium Hypochlorite (Bleach Liquor) / Sodium Hypochlorite (as chlorine)	MT	11769	13495	11762	14214	14026	11815
Hydrogen Gas	Lacs NM <sup>3</sup>	199.54	222.58	245.71	241.04	208.50	179.02
Barium Sulphate	MT	--	--	--	--	--	--

1. Actual production of Calcium Hypochlorite & Sodium Hypochlorite is on liquor basis.
2. Actual production of Hydrochloric Acid is on 30-33% concentration basis.
3. In case of Hydrogen Gas internal consumption and saleable quantity is taken as actual production.
4. A part of the Caustic Soda Lye production is also converted into Caustic Soda Flakes.

**Table XI – Product-wise Sales for last 6 years**

(values in Rs. Crores)

Product	Sales											
	2004-05		2005-06		2006-07		2007-08		2008-09		9months ended 31 <sup>st</sup> Dec., 2009 (Provisional) (Unaudited)	
	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
Caustic Soda Lye (MT)	72873	128.23	87153	169.09	88442	185.61	88382	176.28	76522	188.88	49087	100.63
Caustic Soda Flakes (MT)	5152	9.21	5069	11.49	5867	14.35	3268	7.68	2737	8.09	2744	6.35
Liquid Chlorine (MT)	55722	51.83	68428	47.49	71261	18.63	68083	33.76	57475	17.95	36819	9.64
Hydrochloric Acid (MT)	46290	12.58	45694	9.71	45088	7.97	45611	8.08	47993	8.16	35217	5.00
Calcium Hypochlorite/ Sodium Hypochlorite (as chlorine) (MT)	11799	3.45	13466	4.15	11753	2.90	14224	3.99	13977	4.69	8846	2.40
Hydrogen Gas (Lacs NM <sup>3</sup> )	26.42	1.83	26.32	1.88	39.23	2.98	27.76	2.05	20.71	2.49	16.56	2.29

- The above does not include the sale of traded items.

**Table XII – Financial Performance of PACL***(Rs./Crore)*

Particulars	As at 31.3.2005	As at 31.3.2006	As at 31.3.2007	As at 31.03.2008	As at 31.3.2009
Net Block (Incl. CWIP)	128.66	181.21	170.59	160.33	147.71
Equity Capital	20.47	20.49	20.50	20.50	20.50
Pref. Share Capital	0.00	0.00	0.00	0.00	0.00
Res. & Surplus (excl. revaluation reserve, land subsidy & investment incentive)	35.84	35.94	35.94	35.95	38.62
Accumulated Losses	44.42	23.11	22.12	12.75	--
Misc. Exp. not written off	6.26	4.18	3.52	2.16	1.73
Net Worth	5.63	29.14	30.80	41.54	57.39
Unsecured Loans /from promoters	-	-	-	-	-
Long Term Debts	154.13	127.30	113.27	97.32	73.29
Current Assets	57.72	57.86	55.70	60.63	59.27
Current Liab. & Prov.	26.23	27.71	28.97	34.23	34.56
DER	27.37	4.37	3.68	2.34	1.28
Current Ratio	2.20	2.09	1.74	1.77	1.71
FACR	0.83	1.42	1.51	1.65	2.01

### Corporate Debt Restructuring

The Corporate Debt Restructuring (CDR) Empowered Group of CDR Cell had approved Revised Restructuring Package in June, 2004 under which the debt liabilities of the Company had been restructured, resulting in reduction in rate of interest w.e.f. 1<sup>st</sup> April, 2003 and reschedulement of repayment of debts. The Company had accepted the said Revised Restructuring Package subject to the decision of the CDR Empowered Group to keep three conditions viz. (a) conversion of part of the loan into equity/preference shares and lenders right to sell the converted equity (b) conversion of sacrifices into equity and (c) pledge of shares, in abeyance. The CDR Empowered Group has deferred the compliance of these conditions till 31<sup>st</sup> March, 2010 and the Company has further requested the Monitoring Committee to get this date extended upto 30<sup>th</sup> September, 2010.

The CDR Empowered Group of CDR Cell has further approved a Rework Package of the CDR approved Revised Restructuring Package for the Company, in May and June, 2009 wherein the repayment of the installments of the principal long term dues of the Financial Institutions and Banks falling due between 1<sup>st</sup> April, 2009 and 30<sup>th</sup> September,

2010 has been deferred for enabling the Company to meet the fund requirements for the essential capital and other expenditure in the plant of the Company. The rescheduled debt liabilities will now be repaid in 10 quarterly installments commencing from 1<sup>st</sup> October, 2010 to 1<sup>st</sup> January, 2013.

## 1.12 Manpower

**Table XIII – Manpower (As on 31.03.2010)**

Location	Manpower				
	Managerial	Supervisory	Skilled	unskilled	Total
Head Office (at Chandigarh)	14	34	41	10	99
Works (at Naya Nangal)	14	108	227	34	383
<b>Total</b>	<b>28</b>	<b>142</b>	<b>268</b>	<b>44</b>	<b>482</b>

## 1.13 Common Facilities of PACL & PNFC and Related Issues

PACL & Punjab National Fertilizer & Chemicals Ltd. (PNFC) (under liquidation), both promoted by PSIDC, are located at Naya Nangal, adjacent to each other. To minimize expenditure, it was agreed to share the infrastructure facilities amongst both the units. An Agreement was executed between PACL & PNFC dated 1.3.1986 for sharing the common facilities, which included:

SN	Common facilities	Remarks
(i)	Exchange of land between PACL and PNFC for straightening of common boundary wall, laying of railway tracks and construction of PACL approach road.	-
(ii)	Water Reservoir and Pumping System in factory premises of PNFC and at Nangal Dam Reservoir and Water Pipe Line from Nangal Dam Reservoir to Reservoir in PNFC factory premises.	Owned by PNFC. PACL is drawing water through PACL's pipe line and pumps from the Reservoir in PNFC factory to PACL's Reservoir in PACL's premises.
(iii)	Common power sub-station for supply of power.	PACL has got its independent 66 KV power sub-station inside PACL factory premises. Supply to PNFC sub-station located inside PNFC factory premises is being fed from 66 KV sub-station owned by PSEB but located inside PACL factory premises.
(iv)	Common railway track.	The cost of laying the common railway track from NFL factory to the 'Y' junction (i.e. the point from where bifurcation of the Railway Tracks starts for the PACL Factory and PNFC

SN	Common facilities	Remarks
		Factory) had been borne by PACL and PNFC jointly in the proportion of 1/3 and 2/3, respectively. The cost of laying the individual Railway Tracks from the said 'Y' junction to the factories of PACL and PNFC had been borne independently by PACL and PNFC, respectively.
(v)	Loco Shed in PNFC premises	Cost of Construction shared by PACL and PNFC.
(vi)	Storm water drain	-
(vii)	Common PACL-PNFC staff housing colony	The Houses/ Quarters, etc. of PACL in Old PACL-PNFC Housing Colony are built on 2.674 acres of land leased by NFL exclusively to PACL for a period of 50 years since November 1982. The Houses/Quarters, etc. of PNFC in Old PACL-PNFC Housing Colony are built on the land leased by NFL exclusively to PNFC for a period of 50 years since November 1982. NFL had also leased 30.53 acres of land on 50 years lease since November 1982 to PACL and PNFC jointly. The common parks and roads in the Old PACL-PNFC Housing Colony had been constructed on an area of 13.68 acres out of the said land on joint lease. Out of the remaining about 16.85 acres of vacant and unutilised land on joint lease, PACL has utilised 8.61 acres for the purpose of constructing the New PACL Housing Colony.

#### Subsequent Issues with PNFC:

PNFC had become sick and made a reference to the Board for Industrial and Financial Reconstruction (BIFR) in 1987. BIFR had declared PNFC a sick company and subsequently on 1.3.2000, BIFR recommended winding up of PNFC. The Punjab & Haryana High Court had vide its order dated 27.07.2001 in CP No.71 of 2000 ordered that the PNFC be wound up. The Official Liquidator (OL) attached to the High Court of Punjab & Haryana at Chandigarh as its Liquidator, took possession of the assets of PNFC other than the PNFC's houses/quarters in the housing colony.

PACL is operating, running and maintaining water supply system since August, 2000 pursuant to various orders passed by the Punjab & Haryana High Court, through its employees and at its expenses.

The OL started the process of sale of assets of PNFC. The High Court had vide its Order dated 27.07.2006 in PACL's Company Petition No. 75 of 2006, issued directions to the Official Liquidator that separate lot of common facilities shall be subject to the rights of

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PACL in common facilities in terms of the agreement dated 1.3.1986 entered between PNFC & PACL.

In the meanwhile, PSIDC, promoters of PNFC and also guarantors to the secured lenders of PNFC, has settled with all secured creditors of PNFC by way of one time settlement and as a result, stake of all the secured creditors is expected to be transferred to PSIDC in due course of time. Currently, the assets and affairs of PNFC are under the control of Official Liquidator.

## 2. KEY STRENGTHS OF PACL

### Strengths of PACL include:-

- ❖ One of the largest Caustic Soda manufacturers in the country's Northern Region.
- ❖ Capacity utilization higher than industry average during last 5 years.
- ❖ Plant is strategically located at Naya Nangal, District Ropar, Punjab with close proximity to Bhakra Nangal Dam & River Sutlej. Location of plant is best suited due to availability of uninterrupted Power and continuous water resources which are crucial inputs.
- ❖ Existence of several end user Units in industries like paper, fertilizers, soaps and detergents in the vicinity.
- ❖ Existence of Hydrogen Compressing and Bottling Unit in close proximity of Plant to whom Hydrogen is supplied by the Company through pipeline.
- ❖ The place is also well connected by rail and road.
- ❖ Hydrogen, a by-product of the Plant, is gainfully utilized as a fuel.
- ❖ The company uses the environment friendly Membrane Cell technology in its manufacturing process.
- ❖ The company is entitled to import/ wheel power from any other source under Open Access Policy.
- ❖ Products meet quality requirements and the Company possesses ISO: 9001:2000 certification for its Quality Management System.
- ❖ The company has implemented an environmental management system confirming to ISO 14001:2004 Standard at its works.
- ❖ Large pool of skilled and experienced manpower.
- ❖ Cordial industrial relations with no stoppage of work due to any labour unrest during last more than 15 years.
- ❖ GAIL (India) Limited is planning to extend its Gas Pipeline upto Nangal, which will open up the prospects of availability of Natural Gas for setting up a Gas based Power Plant at Nangal.

- ❖ Increase in power availability in Punjab by 2013, as new power plants and expansion of existing plants has been undertaken in Punjab. Among others, major power plants that are coming up are:
  - a. Coal based Gidderbaha Thermal Power Plant (2160-2640 MW)
  - b. Coal Based Goindwal Sahib Thermal Power Project (540 MW)
  - c. Hydro Based SHAHPUR KANDI HEP (168 MW)
  - d. Many other micro power projects

## 3. INDUSTRY OUTLOOK

### 3.1 Caustic Soda Industry

Electrolysis of brine solution result in 3 products – Caustic Soda, Chlorine gas and Hydrogen in the proportion of 1 MT : 0.886 MT : 280 NM<sup>3</sup>. Combination of Caustic Soda and Chlorine in the above given proportion is termed as Electro Chemical unit (ECU). For caustic soda manufacturers balancing the prices of Caustic Soda & Chlorine becomes critical to get maximum returns on ECU. The ability of the aggregate selling prices of caustic soda and chlorine to generate a surplus over the aggregate cost of production, determines the profitability of a chlor-alkali manufacturer.

Various industries using caustic soda are pulp (30%), manmade fibre (25%), soap & detergent (14%), alumina (11%), dyes and chemicals for water treatment etc. Major consuming industries for chlorine are vinyls including PVC (18%), CPW (11%), Pulp and Paper (8%), Pesticides/ insecticides (5%), water treatment (2%), Pharmaceutical, textiles and various organic and inorganic chemicals etc.

**Table XIV – Demand-Supply of Caustic Soda during last 6 years**

*(Figures in '000 MT)*

Year	Opening Stock	Production	Imports	Total Domestic Availability	Physical Exports	Domestic Consumption	Closing Stock
2003-04	37.80	1741.20	73.10	1852.10	31.20	1801.00	19.90
2004-05	19.90	1812.40	54.90	1887.20	17.60	1855.70	13.90
2005-06	13.90	1936.70	58.30	2008.90	30.90	1960.10	17.90
2006-07	17.90	1993.10	140.70	2151.70	39.00	2092.80	19.90
2007-08	19.90	2160.30	172.50	2352.70	37.80	2288.90	26.00
2008-09	26.00	2198.50	185.10	2409.60	59.00	2317.10	33.50

*(Source: The AMAI Annual Reports)*

The production of Caustic Soda in India during the year 2008-09 was approximately 21.99 lakh MT as against 21.60 lakh MT during the year 2007-08. Thus, there was an increase of 38,204 MT in production during the year i.e. an increase of 1.8% as compared to previous year.

There had been a demand from the industry to impose safeguard duty on imports of Caustic Soda Lye into India in view of huge imports of Caustic Soda. Agreeing with the demand of the industry, Government of India has imposed safeguard duty on import of Caustic Soda with effect from 04.12.2009 and valid upto 03.03.2010. After imposing this duty, there had been a significant impact on the import of the Caustic Soda which had come down drastically.

**Domestic caustic soda consumption expected to remain strong:** Caustic soda demand is expected to grow by 4.9% (CAGR) from 2007-08 to 2012-13, with consumption likely to touch 2,890.7 thousand tones in 2012-13. This compares favourably with the historical 5-year CAGR of 6% achieved during 2003-04 to 2007-08. The alumina and pharmaceutical sectors are expected to be the key drivers of caustic soda demand going forward. Alumina production is likely to double from 2,904 thousand tones in 2007-08 to 5,984 thousand tones in 2012-13, whereas demand for caustic soda from the pharmaceutical industry is forecast to increase by 9.2% (CAGR) to 208.4 thousand tones during the same period on the back of better export potential.

**Table XV – Caustic Soda Production and Consumption Trends**

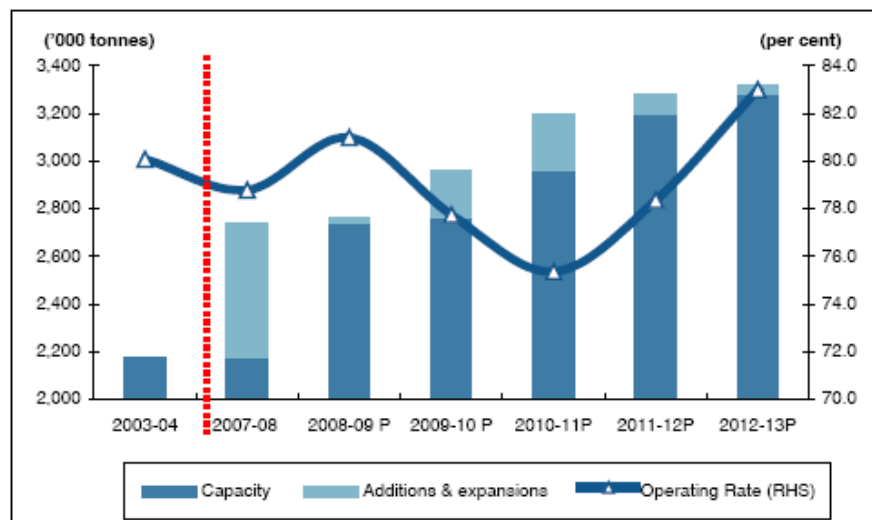
('000 Tonnes)

	2003-04	2007-08	2012-13 P	Historical CAGR 03-04 to 07-08	Future CAGR 07-08 to 12-13
Production	1741	2160	2754	5.5	5.0
Consumption	1801	2273	2891	6.0	4.9
<b>Consumption Mix</b>				<b>Growth in Consumption</b>	
Aluminium	8.6	10.2	16.6	10.7	15.6
Pharma	5.0	5.9	7.2	10.5	9.2
Paper	16.9	21.8	22.3	12.9	5.4
Soaps and Detergents	12.1	11.8	10.3	5.3	2.2
Textiles	12.6	8.8	7.9	(3.2)	2.8
Others	44.9	41.5	35.7	3.9	1.8

*P – Projected.*

*Source: CRISIL Research and AMAI.*

**Domestic utilization rates to improve in the long term reflecting healthy growth in demand:** CRISIL Research expects the industry utilization rates to drop between 2008-09 and 2010-11, rising thereafter to reflect the estimated rise in consumption from the end user sectors. Historically, the domestic caustic soda industry utilization rate has ranged between 80-85%. In 2012-13, domestic caustic soda capacity is forecast to increase by 575.5 thousand tones to 3,317.3 thousand tones.



P: Projected

Source: CRISIL Research

### 3.2 Domestic Capacities and Competitors

There are about 37 Caustic Soda units in the country and Gujarat Alkalies & Chemicals Ltd. is the market leader with installed capacity of 412,500 TPA. Other major producers are Grasim Industries Ltd., Reliance Industries Ltd., Andhra Sugars Ltd., Sree Rayalseema Alkalies & Allied Industries. In northern India, SIEL Chemical Complex, Rajpura (Punjab) (unit of Mawana Sugars Ltd.), DSCL, Kota and Kanoria Chemicals, Renukoot, are the main competitors.