



The Status of Precursor Chemicals in Bhutan

A report based on 2008 Survey

Bhutan Narcotics Control Agency

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Chapter 1: Introduction

1.1 Rationale

The information on the situation, status of import and use of precursor chemicals in Bhutan is very scant and vague and very little is known about it. However it is reasonable to state that chemicals have been imported into the country by some industries, institutions and retailers since the launch of developmental activities in the 1960s. Till date such a need to gather information and data for regulation did not arise and nor was there an agency to coordinate and collect such information. With the ratification of the United Nation's International Conventions of 1961, 1971 and 1988, Bhutan became a signatory to all the International Narcotic conventions. The provisions of these conventions became binding with the enactment of the national legislation on Narcotic Drugs, Psychotropic Substance and Substance Abuse Act, 2005. Under the purview of the national law and the international conventions, the precursor chemicals used in the illicit production of narcotic drugs and psychotropic substances has to be regulated and controlled. Therefore to effectively implement and establish the control mechanisms, a need, firstly to carry out a survey by the Agency became necessary and expedient.

1.2 Objectives of the Survey

The main objectives of the Precursor Chemical Survey of 2008 were the following:

1. List the precursor chemicals imported into the country
2. Unearth the quantities of precursor chemicals imported in the last three years
3. Establish who are the importers and end users of precursor chemicals
4. Find out to for what use the precursor chemicals are being imported
5. Sensitize the end users, importers and stakeholders on the control mechanisms and regulations being put in place

Chapter 2: Survey Methodology

2.1 Scope and Coverage of Survey

Due to constraints in time and resources, the survey only covered major industrial and economic hubs in the country. These economic hubs included the major import and export ports in the country. The survey covered five towns which lie in the industrial belt and are home to the business corporate centres. The survey was conducted in Phuntsholing, Gomtu, Samtse, Galephu and Thimphu towns. These towns were deliberately chosen for this limited survey where statistics showed as major active areas where data could be judiciously collected. Although most of the institutions and schools in the country are end users of precursor chemicals, hardly any of the schools and institutions directly import precursor chemicals. They purchase from authorized retailers for which the import data has been accounted for. Further the data from entry points at the Custom's offices does not reflect institutions and schools as major importers.

The data collected from these areas is therefore comprehensive and reflect the status of precursor chemical import and use in the country.

2.2. Duration of Survey

The Precursor Chemical Survey was programmed for a duration of about a month covering all the predetermined town and entry points. A few days to a week were spent in each station meeting importers and end users for collecting data and information. They were also educated on the comprehensive legislation and regulations that the Government is putting in place hereafter.

The briefing meeting was attended by representatives from enforcement agencies; the Royal Bhutan Police (RBP) and the Department of Revenue and Customs (DRC). Representatives from regulatory agencies which is mandated by the Narcotic Control Board, the Bhutan Agriculture and Food Regulatory Authority (BAFRA) and the Drugs Regulatory Authority (DRA) also participated in the meeting and the survey.

2.3 Data Collection and Source

Representatives were called from all the potential importers/retailers and end users, for a one day briefing on the precursor survey where they were given information on the modality of collection of data. The survey questionnaire were distributed and discussed in the briefing meeting. The representative after the briefing meeting went back to their firms and institutions, collected the data and information and submitted the data to the team. The team also made door to door visits to other potential firms to collected data and information from those firms and institutions who did not attend the briefing meeting.

Chapter 3: Data and Information Analysis

3.1 Importers/Retailers and End Users of Precursor Chemicals

Bhutan does not manufacture any of the 23 precursor chemicals listed in schedule 4. All precursor chemicals are imported from India. During the course of the survey, the team met and held meetings and discussions with industries, government agencies, retailers and institutions. These are the various entities that imported and used precursor chemicals.

Some of the chemicals were directly imported by individual entities where some purchased from retailers and agents. Most industries which have testing laboratories directly imported the chemicals from India whereas institutions generally purchased from retailers.

3.2 Precursor Chemicals Imported in the Country

The 1988 UN convention has identified 23 crucial precursor chemicals that need to be regulated by national nodal agencies. The schedule of these precursor chemicals is listed in schedule IV of the convention. The national legislation of NDPSSA Act, 2005 consequently has adapted the list into its legislative framework.

Not all the 23 precursor chemicals are being imported into the country. The survey has confirmed that only six of the 23 precursor chemicals are being imported into the country.

They are:

1. Sulphuric Acid
2. Hydrochloric Acid
3. Potassium Permanganate
4. Toluene
5. Acetone
6. Methyl Ethyl Ketone

3.3 Quantities of Precursor Chemicals Imported

The quantity of precursor chemicals being imported into the country by and large is small. This is due to the fact that they are not used as raw materials in manufacturing industries albeit the use for qualitative and quantitative testing. The retail quantity although large is due to the fact that these are mostly for institutional use for teaching and research. The per capita

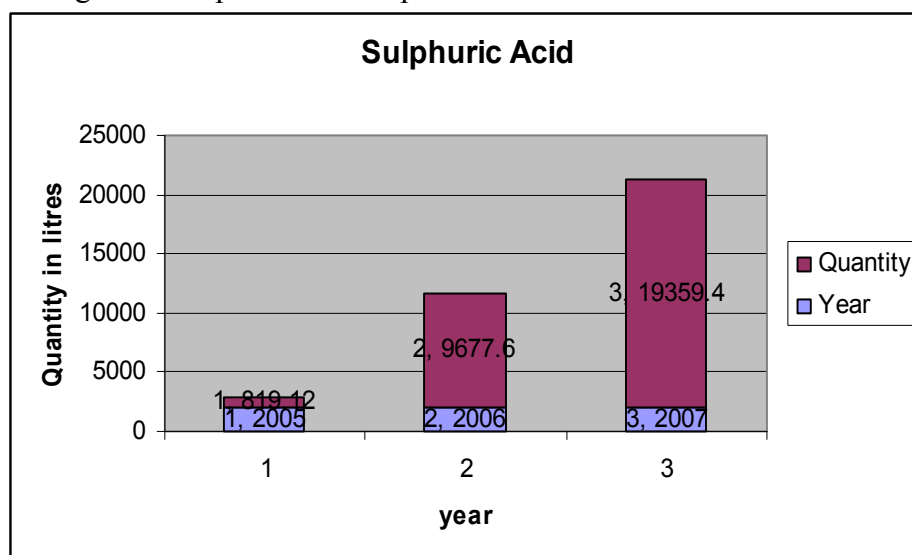
import when the number of institutions and schools taken into consideration works out to a very minimal. The details of the quantities imported for the three years of 2005, 2006 and 2007 are given in table 1.

Table 1: Showing details of chemicals import in the last three years

| Sl | Name of the Chemical | Quantity | | | Remarks |
|----|------------------------|----------|----------|----------|---------|
| | | 2005 | 2006 | 2007 | |
| 1 | Sulphuric Acid | 819.12 | 9677.60 | 19359.40 | Litres |
| 2 | Hydrochloric Acid | 1995.00 | 5686.33 | 4291.80 | Litres |
| 3 | Toluene | 42721.00 | 11140.00 | 24784.00 | litres |
| 4 | Potassium Permanganate | 485.51 | 426.93 | 56.78 | Kgm |
| 5 | Acetone | 48.00 | 554.20 | 12.50 | Litres |
| 6 | Methyl Ethyl Ketone | 10.00 | 5.00 | 1.00 | Litres |

There is no significant changes and variation in the quantities of precursor chemicals imported from 2005 to 2007, except for import of sulphuric acid as shown in figure 1. The import of acid which is mainly used for automobile batteries increased marginally from 2005 to 2007. This is perhaps due to the fact that the demand has increased due to the significant growth in vehicle population over the years.

Figure 1: Sulphuric acid import



3.4 Uses of Precursor Chemicals

Precursor chemicals are being imported for use in industries, for retails and for use in educational institutions. Some precursor chemicals are being used by some industries for processing the product and as raw materials. Precursor chemicals are also used by institutions for teaching and research purposes. Some manufacturing industries, especially the steel

manufacturing industries use chemicals in their laboratories for qualitative and quantitative analysis of raw materials and finished products. Precursor chemicals are also used for water treatment plants by some food processing industries.

Sulphuric Acid is imported for use by automobile battery retailers as materials for vehicle batteries. Small quantities are also being used for laboratory analysis by institutions and quality control and analysis in the laboratories of ferro-alloy and steel industries.

Toluene is used for diluting in the print industry. RSA Poly Product is a major importer and consumer of Toluene in the country.

Hydrochloric Acid is imported mainly for use in laboratory purposes as reagent by some quality control laboratories in industries. Institutions use it for teaching and research purposes mainly for laboratory experiments. It is also used in water treatment plants in some food processing industries.

Potassium permanganate is also used in laboratories as reagents for testing and teaching besides it's use as a bleaching agent and disinfectant in some industries.

Acetone and methyl ethyl ketone are used for teaching and research.

3.5 Documentation, Storage, Pilferage and offences

Most of the importers and end users have reported to be keeping proper records and documents with regard to chemicals. They have stock registers and files maintained as part of the documentation requirement and accounting procedures.

The precursor chemicals are transported in can and glass containers as shipped by the exporting agency. Once on the premise of the importer and the end user, they have been stored in laboratories and store rooms like any other chemicals.

There was no case of reported loss or pilferage by any of the respondents of the survey. None of the proprietors or partners have ever been convicted for any offence under any law as per the respondents.

Chapter 4: Summary of Findings of the Precursor Survey

1. Bhutan does not manufacture any of the 23 precursor chemicals which fall in schedule IV of the NDPSSA Act, 2005 and the UN convention. As a result the regulatory mechanism in place has been greatly simplified.
2. The survey has confirmed that only six precursor chemicals are being imported into the country of the 23 chemicals in schedule 4. None of these were exported as per the survey findings.
3. There are only a handful of players in the field who deal with precursor chemicals. The categories of entities who import precursor chemicals are industries, retailers, government agencies and institutions.
4. Precursor chemicals are mainly used as laboratory reagents in industries for their qualitative and quantitative test and for teaching purposes in institutions. The survey has identified only one precursor chemical (toluene) used for processing in industry.
5. There was no case of reported loss or pilferage of chemicals in the last three years.
6. None of the proprietors/partners/directors of the entity have been convicted of any offence under any law of the country.

Conclusion

The precursor survey has unearthed and brought to light the situation of precursor chemicals in Bhutan. It has been an enlightening experience for the Agency in terms of coming to grasp the status of precursor chemical import and use in the country. The facts that has been unraveled in terms of the players in the field, the types of precursors being imported, the quantities of each being imported over the last three years and their uses will have a bearing on the ability for the Agency to regulate these chemicals. Given that there are only a few players in the field, very few precursor chemicals being imported and limited activity, the Agency is confident that precursor chemical regulation can be effectively implemented as per the provisions of the Narcotic Drugs Psychotropic Substance and Substance Abuse Act, 2005 and the Rules and Regulations.

Annexure 1
Survey by Bhutan Narcotics Control Agency (BNCA) on use of precursor chemicals

QUESTIONNAIRE

1. Please indicate if you are a

Manufacturer
Importer
Actual user
Trader
Distributor
Agent
Exporter
Educational or research institution

of any of the 23 precursor chemicals listed in the UN Convention on Psychotropic substances, 1988? Specify category. For list of precursor chemicals, please see Annexure 1

2. If you fall in any one or more of the categories mentioned at S. No. 1, indicate the following where applicable:

- Name of the individual/ firm/company
- Address of the individual/firm/company
- Name and address of proprietor/partners/director/stakeholders of the entity
- Nature of business
- Specify the names of the precursor chemical(s) you are dealing with
- Address of the premises where the chemicals are used/stored/warehoused/manufactured

- Whether the entity has been convicted of any offence under any law of the country
- Whether the proprietor/ partner/ director of the entity has been convicted of any offence under any law of the country
- Name, designation of the official authorized to sign documents on behalf of the entity in respect of chemicals
- Annual turnover in the last three years in respect of chemicals- details of the usage/ manufacture/ import/ export/ distribution/trading of each of the chemicals may be given
- Details of the documentation maintained by you for the purpose of accounting for the import/export/sale/purchase/use of the chemicals
- Has there been any loss or pilferage of the chemical in the past three years? If, yes, give details thereof
- Type of storage used for storing the chemicals-eg. Cans/ tankers/sacks/ containers etc
- In case you are an educational or research institution using any of the precursor chemicals, specify the purpose for which they are used

Annexure 2

**1. Data on Sulphuric Acid
2005**

| SI | Agency | Category | Quantity(L) | Turn Over | Location | Uses |
|----|-------------------------------|-------------|-------------|-----------|----------|------------------------------|
| 1 | Damchen Petroleum Distributor | Retail | 450 | | Pling | retail |
| 2 | Karma Tshongkhang | Retail | 315.62 | | Pling | retail |
| 3 | Druk Iron and Steel | Industry | 0.5 | | Pling | laboratory Analysis |
| 4 | Drangchu Beverages | Industry | 3.5 | | Pling | laboratory + water treatment |
| 5 | BFAL | Industry | 28 | | Pling | laboratory Analysis |
| 6 | Phuntsholing HSS | Institution | 6.5 | | Pling | laboratory purposes |
| 7 | College of Sc& Techgy | Institution | 7.5 | | Pling | laboratory purposes |
| 8 | Lhaki Cement | Industry | 2.5 | | Gomtu | laboratory Analysis |
| 10 | Penden Cement | Industry | 5 | | Gomtu | laboratory Analysis |
| 11 | Army Welfare Project | Industry | 2.5 | | Samtse | laboratory Analysis |
| 12 | Bhutan Fruit Product | Industry | 0.3 | | Samtse | laboratory Analysis |
| 13 | Samtse HSS | Institution | 0.5 | | Samtse | laboratory purposes |
| 14 | College of Education | Institution | 2.5 | | Samtse | laboratory purposes |
| 15 | Pema Khangsar Wkshop | Retail | 375 | | Sjong | retail |
| 16 | Bhutan Oil Distributor | Retail | 3744 | | Sjong | retail |
| 17 | Army Welfare Project | Industry | 6.48 | | Galephu | laboratory Analysis |
| | | | | | | |
| | Total | | 819.12 | | | |

2006

| SI | Agency | Category | Quantity(L) | Turnover | Location | Uses |
|----|---------------------------------|-------------|-------------|----------|----------|------------------------------|
| 1 | Damchen Petroleum Distributor | Retail | 3690 | | Pling | retail |
| 2 | Karma Tshongkhang | Retail | 379.5 | | Pling | retail |
| 3 | Druk Iron and Steel | Industry | 1 | | Pling | laboratory Analysis |
| 4 | Bhutan Diary | Industry | 21.5 | | Pling | laboratory + water treatment |
| 5 | Drangchu Beverages | Industry | 1.5 | | Pling | laboratory + water treatment |
| 6 | BFAL | Industry | 35 | | Pling | laboratory Analysis |
| 7 | Bhutan Steel Industry | Industry | 8 | | Pling | laboratory analysis |
| 8 | Phuntsholing HSS | Institution | 7.5 | | Pling | laboratory purposes |
| 9 | College of Science & Technology | Institution | 2 | | Pling | laboratory purposes |
| 10 | Penden Cement | Industry | 12.5 | | Gomtu | laboratory Analysis |
| 11 | Gomtu MSS | Institution | 0.5 | | Gomtu | laboratory purposes |
| 12 | Bhutan Fruit Product | Industry | 0.3 | | Samtse | laboratory Analysis |
| 13 | College of Education | Institution | 2.5 | | Samtse | laboratory purposes |
| 14 | Pema Khangsar Workshop | Retail | 375 | | Sjong | retail |
| 15 | Bhutan Oil Distributor | Retail | 5132 | | Sjong | retail |
| 16 | Army Welfare Project | Industry | 8.8 | | Galephu | laboratory Analysis |
| | | | | | | |
| | Total | | 9677.6 | | | |

2007

| SI | Agency | Category | Quantity (L) | Turnover | Location | Uses |
|----|---------------------------------|-------------|--------------|----------|----------|------------------------------|
| 1 | Damchen Petroleum Distributor | Retail | 5760 | | Pling | retail |
| 2 | Karma Tshongkhang | Retail | 174.5 | | Pling | retail |
| 3 | Druk Iron and Steel | Industry | 2.5 | | Pling | laboratory Analysis |
| 4 | Bhutan Diary | Industry | 22.5 | | Pling | laboratory + water treatment |
| 5 | Drangchu Beverages | Industry | 1 | | Pling | laboratory + water treatment |
| 6 | Bhutan Brewery | Industry | 4850 | | Pling | laboratory + water treatment |
| 7 | BFAL | Industry | 50 | | Pling | laboratory Analysis |
| 8 | Bhutan Steel Industry | Industry | 5 | | Pling | laboratory analysis |
| 9 | Bhutan Distributor | Retail | 4000 | | Pling | retail |
| 10 | Phuntsholing HSS | Institution | 2.5 | | Pling | laboratory purposes |
| 11 | College of Science & Technology | Institution | 7.5 | | Pling | laboratory purposes |
| 12 | Phuntsholing MSS | Institution | 0.25 | | Pling | laboratory purposes |
| 13 | Penden Cement | Industry | 2.5 | | Gomtu | laboratory Analysis |
| 14 | Gomtu MSS | Institution | 0.5 | | Gomtu | laboratory purposes |
| 15 | Army Welfare Project | Industry | 0.3 | | Samtse | laboratory Analysis |
| 16 | Bhutan Fruit Product | Industry | 0.3 | | Samtse | laboratory Analysis |
| 17 | Samtse HSS | Institution | 1 | | Samtse | laboratory purposes |
| 18 | Pema Khangsar Workshop | Retail | 150 | | Sjong | retail |
| 19 | Bhutan Oil Distributor | Retail | 4329 | | Sjong | retail |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | Total | | 19359.4 | | | |

2. Data on Hydrochloric Acid 2005

| SI | Agency | Category | Quantity | Turnover | Location | Uses |
|----|---------------------------------|-------------|----------|----------|----------|------------------------------|
| 1 | Karma Tshongkhang | Retail | 75 | | Pling | Retail business |
| 2 | Druk Iron and Steel | Industry | 15 | | Pling | laboratory Analysis |
| 3 | Drangchu Beverages | Industry | 250 | | Pling | laboratory + water treatment |
| 4 | BFAL | Industry | 90 | | Pling | laboratory Analysis |
| 5 | Bhutan Steel Industry | Industry | 120 | | Pling | laboratory analysis |
| 6 | Phuntsholing HSS | Institution | 1.5 | | Pling | laboratory purposes |
| 7 | College of Science & Technology | Institution | 5 | | Pling | laboratory purposes |
| 8 | Jigme Polytex | Industry | 200 | | Gomtu | Cleaning machineries |
| 9 | Lhaki Cement | Industry | 265 | | Gomtu | laboratory Analysis |
| 10 | Penden Cement | Industry | 7.5 | | Gomtu | laboratory Analysis |
| 11 | Army Welfare Project | Industry | 125 | | Samtse | water treatment |
| 12 | Samtse HSS | Institution | 1 | | Samtse | laboratory purposes |
| 13 | Army Welfare Project | Industry | 840 | | Galephu | laboratory Analysis |
| | Total | | 1995 | | | |

2006

| SI | Agency | Category | Quantity | Turnover | Location | Uses |
|----|-----------------------|-------------|----------|----------|----------|------------------------------|
| 1 | Karma Tshongkhang | Retail | 210.6 | | Pling | retail |
| 2 | Druk Iron and Steel | Industry | 68.5 | | Pling | laboratory analysis |
| 3 | Bhutan Dairy | Industry | 3030 | | Pling | laboratory + water treatment |
| 4 | Drangchu Beverages | Industry | 200 | | Pling | laboratory + water treatment |
| 5 | BFAL | Industry | 190 | | Pling | laboratory Analysis |
| 6 | Bhutan Steel Industry | Industry | 48.25 | | Pling | laboratory analysis |
| 7 | Lhaki Cement | Industry | 275 | | Gomtu | laboratory Analysis |
| 8 | Penden Cement | Industry | 110 | | Gomtu | laboratory Analysis |
| 9 | Gomtu MSS | Institution | 0.5 | | Gomtu | laboratory purposes |
| 10 | Army Welfare Project | Industry | 500 | | Samtse | water treatment |
| 11 | Bhutan Fruit Product | Industry | 0.5 | | Samtse | laboratory Analysis |
| 12 | College of Education | Institution | 2.5 | | Samtse | laboratory purposes |
| 13 | Army Welfare Project | Industry | 1050.48 | | Galephu | laboratory analysis |
| | Total | | 5686.33 | | | |

2007

| SI | Agency | Category | Quantity | Turnover | Location | Uses |
|----|---------------------------------|-------------|----------|----------|----------|------------------------------|
| 1 | Karma Tshongkhang | Retail | 289.3 | | Pling | retail |
| 2 | Druk Iron and Steel | Industry | 140 | | Pling | |
| 3 | Drangchu Beverages | Industry | 200 | | Pling | laboratory + water treatment |
| 4 | Bhutan Brewery | Industry | 1000 | | Pling | laboratory + water treatment |
| 5 | BFAL | Industry | 130 | | Pling | laboratory Analysis |
| 6 | Bhutan Steel Industry | Industry | 120 | | Pling | laboratory analysis |
| 7 | Phuntsholing HSS | Institution | 1 | | Pling | laboratory purposes |
| 8 | College of Science & Technology | Institution | 2.5 | | Pling | laboratory purposes |
| 9 | Phuntsholing MSS | Institution | 0.5 | | Pling | laboratory purposes |

| | | | | | | |
|----|----------------------|-------------|--------|--|---------|----------------------|
| 10 | Jigme Polytex | Industry | 150 | | Gomtu | Cleaning machinaries |
| 11 | Lhaki Cement | Industry | 310 | | Gomtu | laboratory Analysis |
| 12 | Penden Cement | Industry | 108 | | Gomtu | laboratory Analysis |
| 13 | Gomtu MSS | Institution | 0.5 | | Gomtu | laboratory purposes |
| 14 | Army Welfare Project | Industry | 500 | | Samtse | water treatment |
| 15 | Samtse HSS | Institution | 6 | | Samtse | laboratory purposes |
| 16 | Army Welfare Project | Industry | 1334 | | Galephu | laboratory Analysis |
| | | | | | | |
| | Total | | 4291.8 | | | |

3. Data on Potassium Permanganate 2005

| SI | Agency | Category | Quantity | Turnover | Location | Uses |
|----|----------------------|-------------|----------|----------|----------|---------------------|
| 1 | Karma Tshongkhang | Retail | 472.5 | | | retail |
| 2 | Druk Iron and Steel | Industry | 0.05 | | | laboratory Analysis |
| 3 | Phuntsholing HSS | Institution | 0.5 | | | laboratory purposes |
| 4 | Samtse HSS | Institution | 1 | | Samtse | laboratory purposes |
| 5 | Bhutan Fruit Product | Industry | 1 | | Samtse | laboratory purposes |
| 6 | Army Welfare Project | Industry | 10.46 | | Galephu | laboratory analysis |
| | | | | | | |
| | Total | | 485.51 | | | |

2006

| SI | Agency | Category | Quantity | Turnover | Location | Uses |
|----|-----------------------|-------------|----------|----------|----------|------------------------------|
| 1 | Karma Tshongkhang | Retail | 415.1 | | | retail |
| 2 | Druk Iron and Steel | Industry | 0.1 | | | laboratory Analysis |
| 3 | Bhutan Diary | Industry | 3.5 | | | laboratory + water treatment |
| 4 | Bhutan Steel Industry | Industry | 0.45 | | | laboratory analysis |
| 5 | Phuntsholing HSS | Institution | 0.5 | | | laboratory purposes |
| 6 | College of Education | Institution | 0.5 | | Samtse | laboratory purposes |
| 7 | Bhutan Fruit Product | Industry | 1 | | Samtse | laboratory purposes |
| 8 | Army Welfare Project | Industry | 0.3 | | Samtse | laboratory purposes |
| 9 | Army Welfare Project | Industry | 5.48 | | Galephu | laboratory analysis |
| | | | | | | |
| | Total | | 426.93 | | | |

2007

| SI | Agency | Category | Quantity(In kg) | Turnover | Location | Uses |
|----|-----------------------|-------------|------------------|----------|----------|---------------------|
| 1 | Karma Tshongkhang | Retail | 0.5 | | Pling | retail |
| 2 | Druk Iron and Steel | Industry | 0.2 | | Pling | laboratory analysis |
| 3 | Bhutan Diary | Industry | 4 | | | |
| 4 | Bhutan Steel Industry | Industry | 0.3 | | | laboratory analysis |
| 5 | Phuntsholing HSS | Institution | 0.5 | | | laboratory purposes |

| | | | | | | |
|---|---------------------------------|-------------|-------|--|---------|---------------------|
| 6 | College of Science & Technology | Institution | 0.5 | | | laboratory purposes |
| 7 | Bhutan Fruit Product | Industry | 50 | | Samtse | laboratory purposes |
| 8 | Army Welfare Project | Industry | 0.3 | | Samtse | laboratory purposes |
| 9 | Army Welfare Project | Industry | 0.48 | | Galephu | laboratory analysis |
| | | | | | | |
| | Total | | 56.78 | | | |

4. Data on Acetone 2005

| SI | Agency | Category | Quantity(L) | Turn Over | Location | Uses |
|----|---------------------------------|-------------|-------------|-----------|----------|---------------------|
| 1 | Karma Tshongkhang | Retail | 46 | | Pling | Retail |
| 2 | Phuntsholing HSS | Institution | 0.5 | | Pling | laboratory purposes |
| 3 | College of Science & Technology | Institution | 0.5 | | Pling | laboratory purposes |
| 4 | Samtse HSS | Institution | 0.5 | | Samtse | laboratory purposes |
| 5 | Bhutan Fruit Product | Industry | 0.5 | | Samtse | laboratory purposes |
| | | | | | | |
| | | | | | | |
| | Total | | 48 | | | |

2006

| SI | Agency | Category | Quantity(L) | Turnover | Location | Uses |
|----|----------------------|-------------|-------------|----------|----------|------------------------------|
| 1 | Karma Tshongkhang | Retail | 551.5 | | Pling | Retail |
| 2 | Bhutan Diary | Industry | 1.2 | | Pling | laboratory + water treatment |
| 3 | Phuntsholing HSS | Institution | 0.5 | | Pling | laboratory purposes |
| 4 | College of Education | Institution | 0.5 | | Samtse | |
| 5 | Bhutan Fruit Product | Industry | 0.5 | | Samtse | laboratory purposes |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | Total | | 554.2 | | | |

2007

| SI | Agency | Category | Quantity (L) | Turnover | Location | Uses |
|----|---------------------------------|-------------|--------------|----------|----------|------------------------------|
| 1 | Karma Tshongkhang | Retail | 3 | | Pling | Retail |
| 2 | Bhutan Diary | Industry | 6.5 | | Pling | laboratory + water treatment |
| 3 | Phuntsholing HSS | Institution | 0.5 | | Pling | laboratory purposes |
| 4 | College of Science & Technology | Institution | 0.5 | | Pling | laboratory purposes |

| | | | | | | |
|---|----------------------|-------------|------|--|--------|---------------------|
| 5 | Samtse HSS | Institution | 0.5 | | Samtse | laboratory purposes |
| 6 | College of Education | Institution | 1 | | Satmse | laboratory purposes |
| 7 | Bhutan Fruit Product | Insdustry | 0.5 | | Samtse | laboratory purposes |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | Total | | 12.5 | | | |

5. Data on Toluene 2005

| SI | Agency | Category | Quantity(In Litres) | Turnover | Location | Uses |
|----|-------------------|----------|---------------------|----------|----------|--------------------------|
| 1 | Karma Tshongkhang | Retail | 1 | | | retail |
| 2 | RSA poly products | Industry | 42720 | 2E+06 | Pling | raw material for pinting |
| | Total | | 42721 | | | |

2006

| SI | Agency | Category | Quantity(In Litres) | Turnover | Location | Uses |
|----|-------------------|----------|---------------------|----------|----------|---------------------------|
| 1 | RSA poly products | Industry | 11140 | 759300 | Pling | raw material for printing |

2007

| SI | Agency | Category | Quantity (In Litres) | Turnover | Location | Uses |
|----|-------------------|----------|----------------------|----------|----------|---------------------------|
| 1 | RSA poly products | Industry | 24748 | 2E+06 | Pling | raw material for printing |

6. Data on Ethyl Methyl Ketone 2005

| SI | Agency | Category | Quantity(In Litres) | Turnover | Location | Uses |
|----|-------------------|----------|---------------------|----------|----------|--------|
| | Karma Tshongkhang | Retail | 10 ltrs | | Pling | retail |

2006

| SI | Agency | Category | Quantity(In Litres) | Turnover | Location | Uses |
|----|-------------------|----------|---------------------|----------|----------|--------|
| | Karma Tshongkhang | Retail | 5 ltrs | | Pling | retail |

2007

| SI | Agency | Category | Quantity(In Litres) | Turnover | Location | Uses |
|----|-------------------|----------|---------------------|----------|----------|--------|
| | Karma Tshongkhang | Retail | 1 ltr | | Pling | retail |

Annexure 3
List of Participants

| sl | Name | Agency | Category |
|----|----------------------|---------------------------------|-----------------|
| 1 | Mr G.B Samal | Bhutan Ferro Alloy Ltd, Pling | Industry |
| 2 | Mr Kaka Wanchuk | Department of Livestock | Government |
| 3 | Mr Kuenzang Dechen | Damchen Petroleum Distributor | Retail |
| 4 | Ms Kuenzang Lhamo | Bhutan Ferro Alloy | Industry |
| 5 | Mr Tshering Nidup | RTIO | Regulatory |
| 6 | Mr Sonam Dorji | RTIO | Regulatory |
| 7 | Ms Sonam Yuden | College of Science & Technology | Institution |
| 8 | Ms Rinchen Yangzom | Phuntsholing HSS | Institution |
| 9 | Mr Chandra L. Rimal | Karma Tshongkhong | Retail |
| 10 | Ms Jangchu | Karma Tshongkhong | Retail |
| 11 | Captain Dorji Peljor | Royal Bhutan Police | Law Enforcement |
| 12 | Mr J.H. Sarkar | Yangzom Scientific Supply | Retail |
| 13 | Mr Biswas Thapa | Bhutan Chemicals and Carbide | Industry |
| 14 | Ms Choning Wangmo | Ugyen Ferro Alloys Ltd | Industry |
| 15 | Mr Bidya Pradhan | Druk Iron and Steel | Industry |
| 16 | Mr Sangay | Phuntsholing MSS | Institution |
| 17 | Mr Karma | DRC | Enforcement |
| 18 | Mr Ugyen Tshering | DRC | Enforcement |
| 19 | Mr Tandin Wangchuk | RCCO, DRC | Enforcement |
| 20 | Ms Nawang Dema | DRA | Regulatory |
| 21 | Ms Tika Maya Adikari | BAFRA | Regulatory |
| 22 | Mr R.S. Tamang | City Corporation | Government |
| 23 | Ms Karma Yangzom | BAFRA | Regulatory |
| 24 | Mr Sumesh | Bhutan Steel Industry | Industry |
| 25 | Mr Sedeeep Pradhan | Bhutan Distributor | Retail |
| 26 | Mr Nabin kumar | RSA Poly Products | Industry |
| 27 | Mr Sangay Cheten | Bhutan Dairy and Agro Industry | Industry |
| 28 | Cap Kuenzang Dorji | Royal Bhutan Police, Gomtu | Law Enforcement |
| 29 | Mr Tshering Wagnchuk | Lhaki Cement | Industry |
| 30 | Mr Bikash Tirwa | Lhaki Cement | Industry |
| 31 | Mr Dorji Tshering | Lhaki Cement | Industry |
| 32 | Mr Sunil Gurung | Bhutan Oil Distributor | Retail |
| 33 | Mr Tashi Dorji | Gomtu MSS | Institution |
| 34 | Mr Passang | Gomtu MSS | Institution |
| 35 | Mr Leki Tshering | DRC | Enforcement |
| 36 | Mr M.B. Pradhan | DRC | Enforcement |
| 37 | Mr Udai Kafley | Penden Cement | Industry |
| 38 | Mr D.B. Ghalley | Jigme Polytex | Industry |
| 39 | Ms Wangmo | Samtse HSS | Institution |
| 40 | Ms Tshering Yanki | Samtse HSS | Institution |
| 41 | Ms Pema Tshozom | Samtse HSS | Institution |
| 42 | Ms Lhaki Wangmo | College of Education | Institution |
| 43 | Ms Dawa Lhamo | College of Education | Institution |
| 44 | Mr Bishnulal Pradhan | College of Education | Institution |
| 45 | Dr M.Sharma | Bhutan Fruit Product | Industry |
| 46 | Mr Phub Gyeltshen | DRC | Enforcement |
| 47 | Capt Karma Dorji | RBP | Law Enforcement |
| 48 | Gopa Dorji Wangchuk | RBP | Law Enforcement |
| 49 | Mr Yeshe Nidup | BAFRA | Regulatory |

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| 50 | Mr Tshering Gyeltshen | Army Welfare Project | Industry |
| 51 | Mr Chhimi Dorji | DRC, S/Jongkhar | Enforcement |
| 52 | Ms Khandu Wangmo | RTIO, Sjong | Regulatory |
| 53 | Lt Karma Delma | RBP | Law Enforcement |
| 54 | Mr Choki Dorji | MSS | Institution |
| 55 | Mr Karma Tenzin | RTIO | Regulatory |
| 56 | Mr Karma Tenzin | P/K Workshop | Retail |
| 57 | Mr Sailash Gurung | Bhutan Oil Corporation | Retail |
| 58 | Mr Pema Chopel | DRC | Enforcement |
| 59 | Mr Dalarin Kundu | SD Ferrosilicon | Industry |
| 60 | Mr Bishnu L. Nepal | SD Ferrosilicon | Industry |
| 61 | Mr Thinley Rabgye | MSS | Institution |
| 62 | Mr Karma T. Dardor | DRC | Enforcement |
| 63 | Mr Chogyal Lhendup | BAFRA | Regulatory |
| 64 | Mr Kesang Yeshe | DRC, Galephu | Enforcement |
| 65 | Mr Kezang Dorji | DRC | Enforcement |
| 66 | Mr Karma Jamtsho | RTIO | Regulatory |
| 67 | Mr Jigme Tshundu | RTIO | Regulatory |
| 68 | Mr Karma | HSS | Institution |
| 69 | Mr Dambar Bdr | HSS | Institution |
| 70 | Mr Dorji | HSS | Institution |
| 71 | Mr Karma Tenzin | AWP | Industry |
| 72 | Mr Tshering Phuntsho | AWP | Industry |
| 73 | Mr Lhendrup | RBP | Law Enforcement |
| 74 | Mr Karsang | RBP | Law Enforcement |
| 75 | Mr Tshencho | RBP | Law Enforcement |
| 76 | Mr Birendra Gurung | Dechencholing MSS, Thimphu | Institution |
| 77 | Mr Lobzang Dorji | MoE | Government |
| 78 | Mr Bhim B. Pradhan | Tashi CC | Retail |
| 79 | Ms Chemi Lham | Bhutan Agro Industries | Industries |
| 80 | Ms Kinley Yangzom | RTIO, | Regulatory |
| 81 | Ms Sonam P. Dorjee | Karma Tshongkhag | Retail |
| 82 | Ms Damcho Dema | Yangchenphu HSS | Institution |
| 83 | Dr Sithar Dorji | BAFRA, MoA | Regulatory |
| 84 | Ms Yeshey Wangmo | LMSS | Institution |
| 85 | Ms Sonam Wangmo | LMSS | Institution |
| 86 | Ms Kinzang Choden | Motithang HSS | Institution |
| 87 | Ms Sonam Deki | YHSS | Institution |
| 88 | Mr Sangpo | DRA, MoH | Regulatory |
| 89 | Maj Dorji Khandu | RBP | Law Enforcement |
| 90 | Mr Chencho Tshering | DPB, | Government |
| 91 | Mr Rinzin Dorji | MoA | Government |

Annexure 4

Precursor Survey Program, 2008

| Date | Program | Remarks |
|--|---|---------------------------|
| January 18, 2008 | Travel from Thimphu to Phuntsholing | |
| January 19-20, 2008 | Preparation for the precursor survey meeting | Prepare Hall for workshop |
| January (21-22), 2008 | Phuntsholing Region Briefing on precursor Chemical Survey and Data Collection | |
| January (23 -25), 2008 | Visit Firms/Institutions for collection of precursor of data | |
| January 26, 2008 | Wrap-Up Meeting with firms/institutions and compilation of data | |
| January 27, 2008 | Travel to Gomtu | |
| January 28, 2008 January 29, 2008 | Briefing Precursor Chemical Survey and data collection Visit firms/factories for collection of data | |
| January 30, 2008 | Travel from Gomtu to Samtse | |
| January 31, 2008 February 1-2 | Samtse Region 1. Briefing on Precursor Chemical survey and data collection 2. Visit firms/factories for collection of data | |
| February 3, 2008 | Samtse to S/jongkhar | |
| February 4, 2008 February 5, 2008 February 6-7, 2008 | Samdrupjongkhar Region 1. Preparation for meeting 1. Briefing on Precursor Chemical survey and data collection 2. Visit firms/factories to collect data | |
| February 9, 2008 | Return to Thimphu | |
| February 3 – 7, 2008 | Galephu Region Preparation, briefing meeting and data collection | CPO, DRD |
| February 16-18, 2008 | Thimphu Region Preparation, briefing meeting and data collection | |
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Precursor Chemical Survey Briefing and Meeting

Venue: Phuntsholing MSS
Date: January 21-22, 2008

Agenda for the Meeting and Briefing

Day 1: January 21, 2008

- 0900 - Participants Report and Register
- 0915 - Welcome Address
 - Introduction of the participants
 - Brief Overview of the Meeting
- 1000 - Morning Tea Break
- 1030 - Presentation on International Convention
 - Presentation on NDPSSA Act, 2005

- 1230 - Lunch Break

- 1330 - Presentation on Narcotic Control Board and BNCA
 - Presentation on Implementation Framework of NDPSSA

- 1500 - Tea Break

- 1530 - Presentation on Rules and Regulations of NDPSSA Act, 2005
 - Discussions on the day's proceedings

Day 2 : January 22, 2008

- 0900 - Precursor Schedule Presentation
 - Precursor Control Regime as per Act and R&R
 - Licensing, Technical Authorization, Import/Export, etc
- 10.30 - Morning Tea Break

- 1100 - Responsibilities of firms/importer/end users
 - Storage, Labeling, Registers, statistical returns, etc

- 12.30 - Lunch Break
- 13.30 - Precursor Survey Questionnaire
- 1500 - Evening Tea Break

- 1530 - Wrap Up Discussions

One Day Meeting and Briefing on Precursor Survey

Venue: Gomtu , Samtse, Samdrupjongkhar, Galephu and Thimphu

Dates: January 28th, 31st, February 5th, February 4th, February 27th

- 0900 - Participant gather
- 0915 - Welcome Address
 - Brief Overview of the program of the day
- 930 - Brief presentation on International convention and national legislation

- 10.30 - Tea Break

- 1100 - Narcotic Control Board and BNCA
 - Implementation Framework of NDPSSA Act, 2005
 - Rules and Regulations of the Act

- 1230 - Lunch Break

- 1330 - Precursor Schedule
 - Precursor Control Regime as per Act and R&R
 - Licensing, Authorization, Registration, etc

- 1500 - Tea Break

- 1530 - Responsibility of firms/importer/end users
 - Storage, Labeling, Registers, statistical returns, etc
 - Precursor Survey Questionnaire
 - Wrap- Up Discussions