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PARIPET		ON	DSECUTION UNDER DRUGS & COSMETICS ACT SAMPLES OF DRUGS DECLARED SPURIOUS OR F OF STANDARD QUALITY	<b>KEY WORDS:</b> Not of Standard Quality; spurious; adulterated; Drugs and Cosmetics (Amendment) Act, 2008.	
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STRACT	The Drugs and Cosmetics (Amendment) Act, 2008 passed by the Parliament on 5th December 2008 provides deferent penalties for offences relating to manufacture of spurious or adulterated drugs which have serious implications on public health. It will help regulatory authorities to handle anti social elements involved in the manufacture of such drugs and playing with human safety. The penalty for manufacture of spurious or adulterated drugs has been enhanced to an imprisonment for a term which shall not be less than 10 years but which may extend to imprisonment for life and shall also be liable to fine which shall not be less than term.				

be less than 10 years but which may extend to imprisonment for life and shall also be liable to fine which shall not be less than ten lakh rupees or three times value of the drug confiscated, whichever is more. In certain cases offences have been made cognizable and non-bailable.

### Introduction:

A

Under the Drugs and Cosmetics Act, 1940 control over manufacture and sale of drugs is exercised by the State Licensing Authorities. Licenses for drug manufacturing establishments and sale premises are granted by the said authorities. Inspections/raids are carried out by the Drug Inspectors appointed by the States to ensure compliance of the conditions of licenses. Samples are drawn by Drug Inspectors to check the quality of drugs marketed in the country. Legal/administrative actions as required under the said Act and Rules for the violation of the provisions of the Act are taken by the State Licensing Authorities. The actions are normally initiated on the basis of test reports of Government analysts declaring the drug samples as not of standard quality. The major categorization of not of standard quality reports could be as under:

### 1. Category A (Spurious and Adulterated Drugs)

Spurious or imitation drug products are drug formulations manufactured concealing the true identity of the product and made to resemble another drug, especially some popular brand, to deceive the buyer and cash on the popularity of original product. The product may or may not contain the active ingredients. Spurious drugs are usually manufactured by unlicensed anti-social elements but sometimes licensed manufacturers may also be involved. The adulterated drugs are those drugs which are found to contain an adulterant/substituted product or contaminated with filth rendering it injurious to health. Reports of availability of spurious drugs in the country shake the confidence of indigenous as well as foreign buyers. As the problem is an emotive issue also, it is required to be handled with a firm hand and in co-ordination with other agencies.

### 2. Category B (Grossly sub-standard drugs)

Drugs manufactured by licensed manufacturers and reported to have defects of serious nature to affect the quality of the drug. Such defects may arise out of gross negligence or nonconformance to GMPs during manufacture. These defects may broadly be as under:

(i) Active ingredient contents below 70% for thermo labile products and below 5 % of the permitted limits for thermo stable products.

(ii) Tablets/Capsules failing in disintegration tests wherever prescribed.

(iii) Tablets/Capsules failing in dissolution test and active contents found less than 70% for thermo labile products and below 5% of the prescribed limits for thermo stable products.

(iv) Liquid preparations showing presence of fungus.

(v) Parental preparations failing in sterility, pyrogen/endotoxin test

or undue toxicity.

(vi)Vaccines failing in potency, sterility, toxicity or moisture content.

(vii) Presence of any adulterant which renders the product injurious to health.

### 3. Category C (Minor defects)

Drugs manufactured by the licensed manufacturers found not of standard quality because of defects arising out of minor variations in quality. Such defects may arise because of inadequate preformulation development studies, lack of in process controls exercised by the manufacturer or unsuitable conditions under which drugs are stored or transported. Examples of some such the defects are as under:

(i) Broken or chipped tablets.

(ii) Presence of spot/discolouration/uneven coating.

(iii) Cracking of emulsions.

(iv) Clear liquid preparations showing sedimentation.

(v) Change in colour of the formulation.

(vi) Slight variation in net content.

(vii) Formulations failing in weight variation.

(viii) Formulations failing to respond to the colour test.

(ix) Isolated cases of presences of foreign matter.

(x) Labeling error including nomenclature mistake, Rx, NRx, XRx, Red Line, Schedule H. Caution, Colour etc.

### **GUIDELINES**

The following guidelines should be adopted as model guidelines by the State Drug Control Organizations for uniform implementation of the provision of the Drugs and Cosmetics Act and rules made there under. While implementing the new provisions, the State Regulatory Authorities should ensure that the law is implemented in a comprehensive way. In order to effectively use the said instrument of law, it is necessary to have Standard Operative Procedures set in each State to examine and process various violations of the provision of the Act. The State Drug Control Organizations should have internal mechanism of checks and balances to ensure that law abiding manufacturers and sellers of drugs are not harassed or put to a disadvantageous position. Care should be taken that while violations with criminal intent or gross negligence leading to serious defects are dealt with heavy hand, the violations involving minor variations in quality by licensed manufacturers are resolved through administrative measures.

1. In the case of detection of manufacture and/or sale etc. of

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spurious or imitation drug products by the unlicensed manufacturers or sellers, the case shall be investigated on top priority and provisions of section 36 AC of the Act invoked under which these offences are considered cognizable and non-bailable. Necessary help from the enforcement agencies like police etc. should also be obtained, wherever required, so that the rackets are busted and culprits booked in time for taking legal action. The investigations in such cases should be expedited and prosecutions launched at the earliest. The quick and timely investigations would have deterrent effect on the unscrupulous persons involved in the nefarious trade of spurious drugs.

2. In the case of detection of a case of manufacture and/or sale etc. of spurious drugs by a licensed manufacturer i.e. use of licensed premises for manufacture of spurious drugs and the criminal intent is apparent, the case is required to be pursued with equal vigor as in the case of unlicensed manufacturer. The investigations should also include the other activities carried out by the manufacturer in the premises.

3. In the case of drugs manufactured by a licensed manufacturer under a valid manufacturing license has been found grossly substandard, the matter may be investigated at the manufacturer's end, and where criminal intent or gross negligence has been established and if the merits of the case so demand, and where it is felt that administrative measures would not be sufficient to meet the ends of justice, the re-course to prosecution should be resorted to,

4. In the case of drugs manufactured by a licensed manufacturer under a valid manufacturing license and found grossly substandard and where criminal intent or gross negligence is not established, weapon of prosecution should be used judiciously, where it is felt that administrative measures like suspension or cancellation of licenses or compounding of offences would not meet the ends of justice.

5. In the case of not of standard quality reports because of minor defects arising out of variations from the prescribed standards or contraventions of other provisions of chapter IV of the Act, administrative measures including suspension/cancellation or compounding of offences may be resorted to. Prosecution may only be launched where it is justifiably felt that above measures would not meet the ends of justice.

6. Section 36-AC which makes certain offences under the Act cognizable and non-bailable has been inserted to facilitate the arrest of anti-social elements involved in the manufacture of spurious or adulterated drugs. The section should therefore be invoked with utmost care and only in cases where it is justifiably felt that it is essential to book the culprits for proper investigations in the case.

7. The State Drug Control Departments shall constitute **screening committees** comprising of at least three senior officers not below the level of Assistant Drugs Controllers or equivalent to examine the investigation reports of the cases where prosecutions are proposed to be launched. The committee may submit written opinion on the investigation reports regarding their feasibility of taking legal action. The criminal intent or gross negligence should be taken into consideration while recommending actions like prosecution etc. Care should be taken that charges framed are not based on inappropriate provisions which may be difficult to prove in the court of law in the absence of proper justification or evidence. Cases of failing in assay, brand name disputes and nonrenewal of manufacturing license in time should cases be examined **on their merits before recommending prosecution in such cases.** 

8. Prosecutions by the Inspectors shall be launched on the basis of written permissions of the controlling authority and this authority in turn shall consider the recommendations of the screening committee while taking final decision in the matter.

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9. The Patent and Proprietary formulations should be tested by the Govt. analysts as provided under rule 46 of the Drugs and Cosmetics Rules. In the case of non-Pharmacopoeial or modified formulations, the samples may be tested as per procedure provided by the manufacturer, which has been duly approved by the licensing authority. In case of non receipt of such procedure on request the sample may be tested as per method of analysis available with the Government analyst.

10. The Drugs Consultative Committee had earlier in 1993 approved detailed guidelines for taking action in specific cases on reports of not of standard quality drugs. These recommendations but for the above shall also be taken into considerations while granting permission for prosecution or administrative action against the offenders.

#### (Annexure A)

11. Co-ordination between regulatory authorities is key to success in taking timely action in cases of violation of the provisions of the Drugs and Cosmetics Rules. The State Drug Control Organizations shall therefore, notify a nodal officer with telephone and fax number at the headquarter as well as circle levels, which could be contacted by other regulatory authorities for exchange of information and co-ordination in search/seizures/raid or investigations in the cases of spurious and adulterated drugs. The detail of these officers shall also be forwarded to the office of DCG (I) so that this information is put on the website of CDSCO for the information of regulatory authorities as well as general public.

12. The State Drug Control Organizations shall create a rapid alert system so that any vital information in the cases of spurious/adulterated drugs is passed on to the appropriate authorities quickly for taking further action in the matter.

13. For combating the menace of spurious/adulterated drugs a robust infrastructure is essential to implement the provisions of the Drugs and Cosmetics Act. The Drug Control Organization in the States are therefore, needed to be strengthened by providing additional manpower, infrastructure, technical capabilities and financial resources for having continuous vigilance about the quality of drugs moving in the market.

#### **ANNEXURE A**

## DCC guidelines on not of standard quality (NSQ) drugs approved in 1993 category B defects tablets

i) Presence of spot/discoloration

- ii) Lump formations in few containers due to moisture
- iii) Failing in uniformity of weight

iv) Picking

v) Chipping

- vi) Capping
- vii) Rough surface

viii) Brittle tablets

- ix) Non Uniformity in diameter
- x) Uneven coating
- xi) Non declaration of colour used on the label

xii) Failing in limit test (e.g. free salicylic acid)

xiii) Assay - 70% and above of the label claim for thermolabile products and 5% within permitted limits for the thermostable products.

xiv) Failing in particle size (Griseofulvin tablets) xv) Net Content

### CAPSULES

i) Presence of spots/discoloration ii) Lump formation in container due to moisture iii) Failing in uniformity of weight iv) Cake/lump formation of content of capsule

v) Failing in limit tests

vi) Assay-70% and above of the label claim for thermolabile products and 5% within permitted limits for thermostable products.

vii) Net Content

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#### LIQUID ORALS (Syrups/elixirs/solutions/suspensions/ emulsions/mixtures etc.)

emulsions/mixtures etc.) i) Presence of foreign matter ii) Change of colour iii) Presence of suspended matter iv) Cracking of emulsion v) Sedimentation vi) Dispersible cake/lump formation vii) Net content

## Category A Defects: TABLETS

i) Assay – below 70% for thermolabile products and below 5% of the permitted limits for thermostable products.

ii) Disintegration (except for marginal variation to be viewed on case to case basis)

iii) Dissolution (except for marginal variation to be viewed on case to case basis)

iv) Contamination with foreign matters

 $\boldsymbol{v})$  Most of the tablets observed in powder form inside the strip pouches

vi) Content uniformity

vii) Addition of permitted colour when not recommended in Pharmacopoeia

## CAPSULES

i) Assay – below 70% for thermolabile products and below 5% of the permitted limits for thermostable products.

ii) Disintegration (except for marginal variation to be viewed on case to case basis)

iii) Dissolution (except for marginal variation to be viewed on case to case basis)

iv) Content uniformity

## LIQUID ORALS

i) Assay – below 70% for thermolabile products and below 5% of the permitted limits for thermostable products.

ii) Presence of foreign matter such as fly/insect.

iii) Fungus growth

iv) Non dispersible cake/lump formation.

v) Addition of non-permissible colours.

## **EXTERNAL PREPARATIONS**

i) Assay – below 70% for thermolabile products and below 5% of the permitted limits for thermostable products.
ii) Phenol coefficient (RWC) less than label claim Grade I : less than 16 Grade II : less than 8 Grade III : less than 4

For other soluble disinfectants: below 80% of the required limit fungal growth

## **OPHTHALMIC PREPARATONS**

i) Assay – below 70% for thermolabile products and below 5% of the permitted limits for thermostable products.
ii) Foreign matter
iii) Metal particles
iv) Fungal growth
v) Fails in sterility

## POWDERS (oral use)

 i) Assay – below 70% for thermolabile products and below 5% of the permitted limits for thermostable products.
 ii) Fungal growth

## POWDERS (external use)

i) Assay – below 70% for thermolabile products and below 5% of the permitted limits for thermolabile products. ii) Fungal growth

## INJECTIONS INCLUDING TRANSFUSION FLUIDS

I) Sterility ii) Pyrogen test

iii) Toxicity

iv) Assay – below 70% for thermolabile products and below 5% of

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the permitted limits for thermostable products. v) Fails in any other biological test vi) Fungal growth in different samples from different sources of same batches.

## STERILE DISPOSABLE PERFUSION SETS

I) Sterility ii) Pyrogen test iii) Toxicity

### STERILE DISPOSABLE HYPODERMIC SYRINGES

I) Sterility

ii) Pyrogen test iii) Toxicity

### STERILE DISPOSABLE HYPODERMIC NEEDLES

I) Sterility ii) Pyrogen test iii) Toxicity

### **BULK DRUGS**

i) Assay – less than permitted limits
ii) Heavy metal test/arsenic test
iii) Sterility
iv) Toxicity
v) Microbial limit test

### **AEROSOLS/INHALATIONS**

 i) Assay – below 70% for thermolabile products and below 5% of the permitted limits for thermostable products.
 ii) Leak test

## SERA/VACCINE

I) Toxicity ii) Sterility iii) Potency

## SUTURES/CATGUTS

l) Sterility ii) Tensile strength

## **MECHANICAL CONTRACEPTIVES**

i) Water leakage test ii) Tensile properties

### INTRAUTERINE CONTRACEPTIVE DEVICES

i) Memory test ii) Ash content iii) Sterility iv) Implantation test

## COSMETICS

i) Use of non permitted colours/dyes ii) Presence of heavy metal

### ACTION TO BE TAKEN ON CATEGORY B DEFECTS

1. Stoppage of further sale and recall of batch of the drugs from the market.

2. Manufacturer to be asked to intimate stock and distribution details etc. of the particular batch.

3. Calling of explanation from the manufacturer.

4. After receipt of explanation or investigation report, if any carried out, further appropriate action may be taken by issuing show cause notice etc. if so required.

## ACTION TO BE TAKEN ON CATEGORY A DEFECTS

1. To enquire in the matter immediately.

2. Issue instructions for immediate recall of batch from the market and to stop further sale.

3. To ask for particulars of stock, distribution and production and test records.

4. Calling of explanation from the manufacturer by issuing a show cause notice as to why license for the product/entire licence should not be suspended/cancelled.

5. After receipt of explanation and/or investigation report, further

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appropriate action may be taken.

## PRINCIPLES FOR INSTITUTION OF PROSECUTION UNDER DRUGS & CONSMETICS ACT:

The weapon for prosecution should be used sparingly and judiciously but due regard to merits of the case be given as a prudent measure. Prosecution should be launched where administrative measures have failed to have desired effects. However, while deciding to prosecute, due regard should be given to the nature of contraventions.

The persistent defaulter should be prosecuted but minor omissions may not form the basis of prosecution. Administrative action should be initiated wherever possible to ensure preventive measures to safeguard public health. A broad classification of cases where prosecutions should be launched is given below:

1. Where a spurious drug of drug falling within the meaning of adulterated/spurious/misbranded under Section 17(A), 17(B) and 17 of Drugs and Cosmetics Act is manufactured, sold or stocked or exhibited for sale or is distributed.

2. Cosmetic falling within the meaning of spurious cosmetics under Section 17(D) and misbranded under Section 17(C).

3. Where drugs/Cosmetics are manufactured without a license.

4. Where a parenteral preparation is reported by the Government Analyst to be non-sterile, pyrogenic or toxic and provided on investigation is found to be substandard due to lack of adequate quality control and adherence to the provisions of GMP in the manufacturing processes.

5. Where a drug is found grossly sub-standard repeatedly. Central Drugs Standard Control Organization 12

# Prosecutions are not ordinarily warranted in the following cases:

The sub-committee feels that it is not necessary to specify the matters where prosecutions are not warranted as guidelines have already been suggested about the cases where prosecutions could not be considered.

## Interstate coordination on matters referred to state drugs controller:

The sub-committee examined this specific issue and after detailed deliberations came to the conclusion that it may not be pragmatic to stipulate that a prosecution may be launched only by the Drugs Controller in whose state the sample has been drawn or by the Drugs Controller in who's State the manufacturer is situated. It should be left at the discretion of the concerned Drugs Controller to file a prosecution in his State or to refer the case to the Drugs Controller of the manufacturing State as circumstances warranted. Every Drugs Controller should invariably supply the information sought by other Drugs Controller in case the prosecution is contemplated. However, due regard should be given to the factual position or opinion supplied, if any, by the Drugs Controller of the State where the manufacturer is situated.

#### Summary:

The above are broad guidelines for the guidance of State Drugs Control authorities. Cases not specifically covered by these guidelines or specific cases where a more serious/lenient view has to be taken, appropriate view can be taken by the State authorities, depending on circumstances of the case. It is expected that final action after receipt of a note of standard quality report is taken within three months by the licensing authority/controlling authority and the same is informed to all concerned. Repeated observance of Category B defects of a particular manufacturer should call for thorough inspection of manufacturing practices and facilities. If found deficient, it should be viewed seriously and stringent action is to be taken.

#### REFERENCES

- Vijay Malik, Drugs and Cosmetics Act, 1940, 25th Edition, 2016:33-38, 139-144.
   Roger Jeffery et. al. Pharmaceutical distribution systems in India. The centre for International Public Health Policy : Tracing pharmaceuticals in South Asia: 2007 : 1-27
- 3. Karnataka Govt. Budget allocation to Drugs Control Department for the year 2016-

- Govt. Analyst, DTL Bengaluru list of minimum requirement of samples.
   Govt. analyst DTL Bellary Specimen copy.
- 6. Statistics showing details of samples drawn for five years issued by govt. analyst
- DTL Bengaluru CDSCO website. Available at http://www.cdsco.nic

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