



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

RECEIVED

OCT 2 1985

JUL 11 1984

CEP & TOX TECH CTR.

Copy to:  
Bernie Allen  
Dale Green  
Rod McElroy  
Jim McIner  
Gary Phillips  
Karen Stewart

MEMORANDUM

SUBJECT: Vinyl Chloride NESHAP Enforcement Strategy

FROM: Edward E. Reich, Director  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

Michael S. Alushin *M. S. Alushin*  
Associate Enforcement Counsel  
for Air

TO: Air and Waste Management Division Directors  
Region II, IV, and VI

Air Management Division Directors  
Regions I, III, V, and IX

Regional Counsels  
Regions I-VI and IX

R&S 029033

Attached is our strategy for the enforcement of the vinyl chloride NESHAP standard. This strategy was developed as a product of the Regional submittals we received in response to our memoranda of June 28, 1983 and January 23, 1984.

In putting together this strategy, we have found that most of the Regional Offices have sources which should receive priority for enforcement action. We expect these Regions to act on the basis of this strategy and to prepare cases expeditiously. Although this strategy focuses primarily on stripping violations and on reactor opening loss violations, all parts of the standard should be examined when preparing cases.

In transmitting this information to us, several of your offices have indicated that individual companies have asked that some of the information be treated as confidential. This material is contained in Table 5, "Summary of RVD Responses", which is being sent to you under separate cover. No Agency

determination has been made on the confidentiality of these requests. However, because this material has been separated from the rest of the strategy, the bulk of the strategy may now be circulated to State and local enforcement agencies.

We would appreciate your prompt attention to this material. Please contact Doreen Cantor of SSCD at 382-2874, or Elliott Gilberg of OECM at 382-2864, with any comments or questions.

Attachment

R&S 029034

## Vinyl Chloride NESHAP Enforcement Strategy

In our memorandum of June 28, 1983, we addressed our concern that the Regions be consistent in enforcing all major provisions of the vinyl chloride standard, including those portions other than the relief valve discharge regulations. In that memorandum, we requested your help in developing guidelines for the enforcement of the regulations for stripping and reactor opening losses. We have compiled the Regional data submitted to us on the percentage and magnitude of violations of the stripping and reactor opening loss standards from the two most recent semiannual reports for each source. These data are summarized in Table 1. The purpose of this strategy is to discuss the results of this compilation and its implications for future enforcement activity by the Regional Offices.

Although we have attempted to establish a framework for setting priorities for enforcement action, we emphasize that this does not change the standard or the definition of a violation, and establishes no right or privilege for regulated sources. Our recommended action levels are to be used as a basis for prioritization only.

Because of the fairly large number of sources with substantial violations, our prioritization effort resulted in over two-thirds of the sources being identified initially in the highest category of priorities. Based on available State and Regional resources and on the additional factors for enforcement that will be discussed, each Region and State should feel free to take enforcement efforts beyond our recommended levels, provided action is ongoing against the more substantial violators. The goal for compliance remains at 100%.

In most cases, the vinyl chloride standard has been delegated to a State or local agency. Where this is the case, the Regional office should look to the State to obtain a satisfactory resolution. Where a State fails to act in a satisfactory manner or where the State has not received delegation, the Region should respond to ensure the fulfillment of this responsibility.

A satisfactory State enforcement action is one which requires expeditious installation of equipment or other remedial measures which, in EPA's view, are sufficient to bring the source into compliance. In addition, the State action must require payment of a civil penalty of sufficient magnitude appropriate to the violation. A State does not

R&S  
029035

necessarily have to assess a penalty which would suffice as a settlement figure for a Federal action as discussed below. If a State action is adequate in terms of remedial relief but fails to assess an adequate penalty, the Region should consider a separate Federal action for penalties consistent with the recently issued Policy Framework for State Enforcement "Agreements".

When EPA action is required, this will generally mean the commencement of a judicial action. The only administrative authority EPA has to assess penalties is under Section 120, which cannot be applied to discrete, intermittent violations. The only other applicable administrative enforcement mechanism (other than emergency powers) is an order under Section 113(a), which does not involve penalties and which should be considered only in instances in which the penalty assessment would be negligible. However, where the State is the enforcing authority, an administrative procedure may be appropriate, provided that adequate penalties are assessed for all violations, including those not exceeding the levels of frequency or magnitude contained in Table 2.

Many factors enter into a decision on when to initiate enforcement activity for a particular source. Factors which we believe are most important are:

1) Frequency of violations. We have summarized data on the percentage of noncompliance for each source. Although this may serve as a good indication of where priorities should be focused, it is generally recommended that the Regions go beyond the two most recent semi-annual reports to strengthen cases or to uncover additional histories of noncompliance. All violations which occurred in the five-year period preceding the filing of the complaint should be addressed, as well as each type of violation (relief valve discharge, stripping, reactor opening loss, 10ppm). Even if a source has shut down, enforcement action for penalties may be appropriate if it would serve an important enforcement objective, such as creating an incentive for the company to improve its operation of other vinyl chloride plants.

Issues which should be addressed include:

- a) Is there a repeated pattern of violations?
- b) Has there been an increasing (or constant) frequency of violations?
- c) Has a substantial amount of time elapsed since the most recent violation?

2) Magnitude of Violations. We have also summarized data on the range of magnitudes of violations for each source, and have compared sources based on their most severe violation. Again, although this may be a good starting point, this should be further investigated by the Regional Offices to determine if this type of comparison is truly representative. Other issues which should be addressed include:

a) Has there been an increasing (or constant) trend in the magnitude of violations?

b) Is the total combined magnitude of violations significant? This may be a more realistic basis in some cases.

3) Available remedial measures. Issues include:

a) Can specific remedial measures be identified?

b) Has there been a lack of attempts to remedy the problem?

c) Is there a common cause or common remedy for many violations?

d) Has the source provided a remedy only after being informed of the violation?

4) Comparison with other sources. The attached tables and graphs are designed to give the Regions some idea of the severity of noncompliance nationwide, so that individual enforcement needs and efforts may be gauged. Each Region should set priorities based on the following:

a) How does a source compare with other sources in the Region?

b) How does a source compare with other sources nationwide?

c) What is the trend of the industry in general?

5) Source Reporting. In delegated States, sources are required to submit reports to both EPA and the State unless the delegation specifies that reporting to EPA is not required. In many cases, we were not able to determine whether each source is reporting on time to the State and/or Regional Office, and if

R&S 029037

these reports are complete and accurate. Because our ability to enforce against RVD, ROL, and stripping violations hinges on self-reporting, we consider reporting violations to be very serious. States and/or Regions should be current with each source's reporting and should consider prompt action when a source fails to report. The existence of reporting violations should weigh heavily in the direction of initiating enforcement action. Where a source refuses to submit required reports despite notification by the State and/or EPA, the Region should consider whether criminal enforcement action is warranted.

The attached graphs (Figures 1-8) display the data summarized in Table 1, in an attempt to identify the most severe violators and target them for enforcement action. As shown in each of the graphs and in Table 2 (Enforcement Priorities), we have chosen recommended levels of violations to indicate the highest priority violations for which an enforcement action should be initiated. These levels were selected on the basis of (1) being the level closest to the standard that a significant majority of sources were achieving, or (2) being the level at which an identifiable break could be located (*i.e.*, a level at which sources could either easily achieve or be far beyond). It is important to emphasize that these levels are intended to be fluid. This analysis will be done again at some point in the future, at which point we expect these levels will have moved closer to the standard, thus targeting a new set of sources (assuming sources presently targeted will have achieved compliance).

Generally, either frequency or magnitude of violations is sufficient to establish a source as high priority for enforcement action. Thus, sources with a large number of relatively small violations, and sources with a relatively low number of significant violations, will be high priority sources. However, sources exhibiting a compliance rate of 99% or greater are not suggested for high priority status on the sole basis of magnitude of violation. One exception to this applies to large sources and should be determined on a Regional level. Large sources with a significant number of violations should be prioritized for enforcement action, even if their compliance rate is relatively high due to the size of the source. Sources having continuing violations, even if these violations are individually relatively minor, are still being accorded high priority.

In prioritizing sources based on magnitude of violation, sources were ranked according to the magnitude of their largest violation. Other methods of ranking (average magnitude of violation, total magnitude, percent of allowable, etc.) are possible and may be a more realistic basis in some cases. However, in attempting to conserve Regional resources for other activities involved in vinyl chloride enforcement, we feel that the magnitude of the largest violation is a useful indicator of the potential severity of a number of violations, and can be obtained much more easily than can be averages or totals for large numbers of violations. We prefer that the bulk of resources be spent in enforcing against individual sources rather than in prioritizing a large number of sources. Assistance in determining what sources in each Region are highest priority sources is available from SSCD.

Table 3 describes how many facilities would be targetted for enforcement action in the highest priority category using the present priority levels. This is then broken out by Region. In some cases, there are large differences between the Regions in the degree and type of enforcement action targetted by this memo. Some of this may be due to individual sources; some may be due to varying degrees of aggressiveness of State and Regional enforcement efforts. Because this table is based solely on violations of the stripping and reactor opening loss standards, some of the targetted sources already have ongoing enforcement actions against them for relief valve discharges.

When a case has already been filed against a source for other types of violations and is currently in litigation, the Government must decide on a case-by-case basis whether the complaint should be amended to incorporate newly identified violations into the existing case. Generally speaking, the new violations should not be added to an ongoing case in which a trial date has been set or a discovery cutoff date is near. If little or no activity beyond the filing of a complaint and answer has taken place, amending the complaint is probably appropriate. In all instances in which a case is pending against a source for other violations, the Region should consult with the EPA Headquarters and Department of Justice attorneys assigned to the case.

R&S 029040

Table 4 contains factors to be used to determine minimum settlement penalty figures in preparing civil actions. The penalty should be based on the following factors: seriousness of the violation (gravity component), the degrees of willfulness or negligence, degree of cooperation or noncooperation, history of noncompliance, ability to pay, and other unique factors. The economic benefit of noncompliance should also be considered in those instances in which a specific piece of equipment can be identified as a necessary remedial measure. See the memorandum entitled "Proposed Clean Air Act Stationary Source Civil Penalty Policy," which we sent to you on June 5, 1984. The vinyl chloride penalty policy will ultimately be codified as part of the final stationary source civil penalty policy.

The chart in Table 4 should be used to assign a number attributable to the gravity of the violations. Penalties escalate both by the magnitude of each individual violation, and by the total number of violations. The penalty numbers in Table 4 are to be assessed for each violation and are then to be added to obtain a settlement figure for a case involving numerous violations. Additional penalties accrue for failure to submit timely semiannual and discharge reports. As a matter of policy, the settlement figure is set at a total of up to \$25,000 for each failure to report, even though as a legal matter the statutory maximum is arguably \$25,000 per day for each day the failure to report is not remedied. Penalty schemes are included for relief valve discharges, exhaust gas violations, stripping violations, and reactor opening loss violations.

Finally, Table 5 (being sent under separate cover) contains a summary of the Regional responses to our request for information on relief valve discharges. The complete responses are available from the Stationary Source Compliance Division. In many cases however, complete information was not available from the Regional Offices. This information may be essential in preparing enforcement actions and efforts should be made to obtain this data from each source. Because Table 5 contains material which has been claimed to be confidential by a number of sources, it is being sent separately to allow the rest of this strategy to be distributed to State and other non-EPA enforcement agencies.

We interpret the relief valve discharge standard to establish a presumption that any relief valve discharge is a violation, with the company having the burden to show that it was not preventable (see Attachment I, Headquarters Policy Memoranda on Relief Valve Discharges). Nonetheless, to litigate a case, the Agency should be prepared to counter evidence that the discharge was due to an "emergency" by showing that specific measures are available which could have prevented the discharge, and that such measures were not taken by the source.

For relief valve discharges, the litigation report forwarded to Headquarters should include, at a minimum:

- 1) The date and size of each relief valve discharge, including those determined to be emergencies.
- 2) The Region's determination as to whether each discharge is preventable, i.e., a violation.
- 3) An analysis of the cause of each discharge. Attachment 2 is an example of the technical evaluation of a company's discharges which was included as an exhibit to a litigation report referred to HQ.
- 4) A description of remedial measures designed to prevent the types of discharges which have occurred at the plant. As you can see from Attachment 2, this is a logical complement to the analysis of the cause of each discharge.
- 5) A proposal for a minimum settlement penalty figure.

Depending on the level of detail contained in the 10-day report submitted by the company, the Region may have to seek more information using a Section 114 letter to properly prepare the litigation report. Examples of records which may be useful are logs, written maintenance procedures, inspection manuals, incidents reports, employee records (to show possible disciplinary action or failure to take such action), strip charts, etc. This is potentially potent evidence, because it may reveal answers to such questions as:

- 1) Was the company following its own standard operating procedures?

R&S 029042

2) Did the company allow a discharge to occur in order to preserve the integrity of the product and thereby save money? (e.g., low grade resin is less profitable than high grade resin, and this may affect operating decisions.)

3) Did the operator fail to recognize upset conditions?

4) Did the company fail to replace defective equipment despite a prior history of problems?

5) Did the company fail to analyze a recurring problem?

6) Did the company perform an engineering study (or retain a consultant to do so) and fail to adhere to the study's recommendations?

Attachment 3 is a sample Section 114 letter which was used to develop the litigation report in one of the cases referred to Headquarters.

For reactor opening loss and stripping violations, the litigation report forwarded to Headquarters should include, at a minimum:

1) The date and amount of each exceedance. If the number of violations makes such a listing impractical, the litigation report shall summarize the data and cite to the semi-annual reports so that the reader can readily identify the violations.

2) A copy of all semi-annual reports for the period covered by the referral.

3) A description of remedial measures designed to prevent future violations.

4) A proposal for a minimum settlement penalty amount.

Attachment 4 is a list of Regional technical and legal contacts involved in vinyl chloride enforcement. It is hoped that this will encourage the exchange of general information, and also more specific information such as the availability and usefulness of particular remedial measures.

TABLE 1: Summary of Violations of Stripping and Reactor Opening Loss Standards

| Region | Source                | Stripping |              |            | Reactor Opening Loss |             |            |
|--------|-----------------------|-----------|--------------|------------|----------------------|-------------|------------|
|        |                       | %         | Range        | (Standard) | %                    | Range       | (Standard) |
|        | Borden                | 0         |              | (400)      | 0.01                 | .045,.07    | (.02)      |
|        | BFGoodrich            | 0         |              | (400)      |                      |             |            |
|        |                       | 0         |              | (400)      |                      |             |            |
|        |                       | 0.3       | 2278         | (2000)     | 0                    |             | (.02)      |
|        | Goodyear              | 0         |              | (2000)     | 0                    |             | (.02)      |
|        | Occidental            | 2.6       | 428-2408     | (400)      | 0                    |             | (.02)      |
|        | Pantasote             | 1.2       | 415-422      | (400)      | 3.5                  | 363-422     | (350ppm)   |
|        | Tenneco/Burl.         | 0         |              | (400)      | 1.2                  | 2318        | (2190ppm)  |
|        |                       | 3.2       | 2091         | (2000)     | 1.3                  | 8957        | (2670ppm)  |
|        |                       |           |              |            | 0                    |             | (2540ppm)  |
|        | Tenneco/Flem.         | 0         |              | (400)      | 4.7                  | 2629-2895   | (2604ppm)  |
|        | Union Carbide         | 0         |              | (400)      | 0                    |             | (.02)      |
|        | Ethyl                 | 8.5       | 519          | (400)      | 9.4                  | .0216-.1085 | (.02)      |
|        |                       | 4.4       | 2046-3330    | (2000)     |                      |             |            |
|        | Occidental/Potts.     | 8.8       | 414.5-1430.1 | (400)      | 2.0                  | .0263       | (.02)      |
|        |                       | 2.9       | 2035-2514    | (2000)     |                      |             |            |
|        | *Occidental/Perry.    | 1.0       | 508          | (400)      | 0                    |             | (.02)      |
|        |                       | 0         |              | (2000)     |                      |             |            |
|        | Formosa               | 0.9       | 571-630      | (400)      | 0                    |             | (.02)      |
|        |                       | 4.3       | 2091-2710    | (2000)     |                      |             |            |
|        | Conoco                | 3.7       | 411-967      | (400)      | 0                    |             | (.02)      |
|        | Union Carbide         | 0         |              | (400)      | 0                    |             | (.02)      |
|        | AP&C/Kentucky         | 0         |              | (400)      | 0                    |             | (.02)      |
|        | AP&C/Pensacola        | 0         |              | (400)      | 0                    |             | (.02)      |
|        | BFGoodrich/Louisville | 0.6       | 456.8-716.0  | (400)      | 0                    |             | (.02)      |
|        |                       | 0.3       | 641.9        | (400)      |                      |             |            |
|        | BFGoodrich/Henry      | 0.6       | 432-1129     | (400)      | 0                    |             | (.02)      |
|        |                       | 0.9       | 2306-3032    | (2000)     | 0.1                  | .022-.03    | (.02)      |
|        | Borden                | 0         |              | (400)      | 0                    |             | (.02)      |
|        |                       | 0         |              | (2000)     | 0                    |             | (.02)      |
|        | Dow                   | 0         |              | (400)      | 0                    |             | (.02)      |
|        |                       | 0         |              | (2000)     | 0                    |             | (.02)      |
|        | BFGoodrich/AvonLake   | 0         |              | (400)      | 0.2                  | .0273       | (.02)      |
|        |                       | 0.6       | 3051-7820    | (2000)     | 0.3                  | .0221-.0842 | (.02)      |
|        |                       | 0         |              | (400)      | 0                    |             | (.02)      |
|        | General Tire          | 7.6       | 401-1504     | (400)      | 0                    |             | (.02)      |

R&S 029043

| Region        | Source             | Stripping |        |            | Reactor Opening Loss           |         |            |
|---------------|--------------------|-----------|--------|------------|--------------------------------|---------|------------|
|               |                    | %         | Range  | (Standard) | %                              | Range   | (Standard) |
| 5             | BFGoodrich         | 0         |        | (400)      | 0.01                           | unknown | (.02)      |
|               | CertainTeed        | 0         |        | (400)      | unreported-\$114 request (.02) |         |            |
|               | Conoco             | 0.3       | 419    | (400)      | 0.2                            | <0.37   | (.02)      |
|               | *Ethyl             | 0         |        | (2000)     | 2.0                            | <3.3    | (.02)      |
|               |                    | 7.1       | <874.3 | (400)      | 0                              |         | (.02)      |
|               | Georgia-Pacific    | 0         |        | (400)      | 7.5                            | <0.09   | (.02)      |
|               | Occidental         | 0.6       | <1103  | (400)      | 8.7                            | <0.39   | (.02)      |
|               | Shintech           | 1.1       | <931.6 | (400)      | 5.2                            | <0.088  | (.02)      |
|               |                    | 1.7       | <989.5 | (400)      | 0                              |         | (.02)      |
|               | Tenneco            | 0.2       | <624.0 | (400)      | 25.0                           | <1.62   | (.02)      |
|               | BFGoodrich         | 0.2       | <606   | (400)      | 1.2                            | <0.277  | (.02)      |
|               | Del. City Plastics | 5.0       | <2166  | (400)      | 2.1                            | <0.0253 | (.02)      |
|               | Union Carbide      | 0         |        | (400)      | 0                              |         | (.02)      |
|               |                    |           |        |            |                                |         |            |
|               | BFGoodrich         | 0         |        | (400)      | 0                              |         | (.02)      |
|               | Keysor-Century     | 0         |        | (400)      | 0                              |         | (.02)      |
| Union Carbide | 0                  |           | (400)  | 0          |                                | (.02)   |            |

\* No longer conducting PVC processes

Figure 1

Stripping (total)  
(percentage of violations)

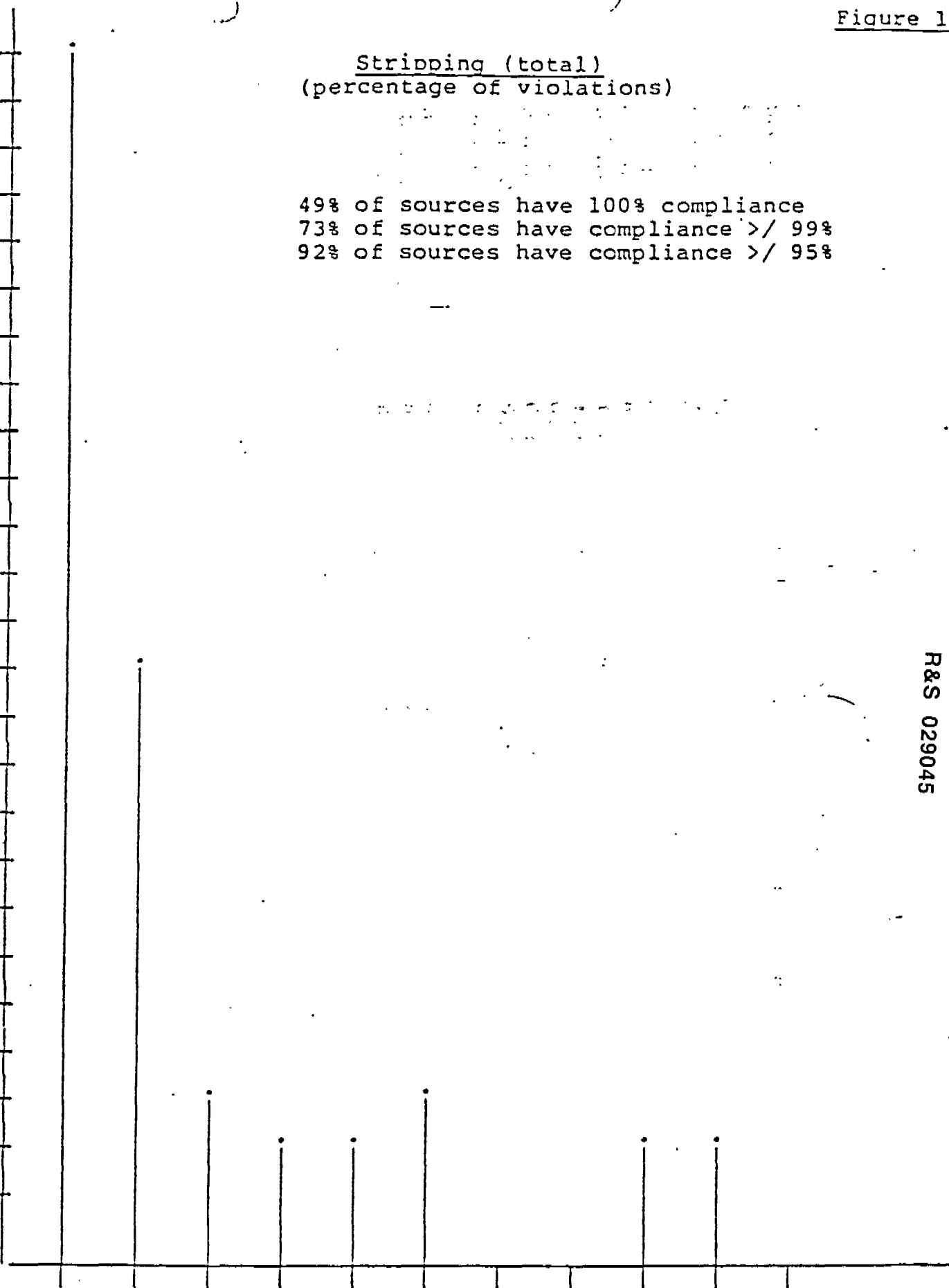
49% of sources have 100% compliance  
73% of sources have compliance >/ 99%  
92% of sources have compliance >/ 95%

(total) <-----> # of sources

R&S 029045

0 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10

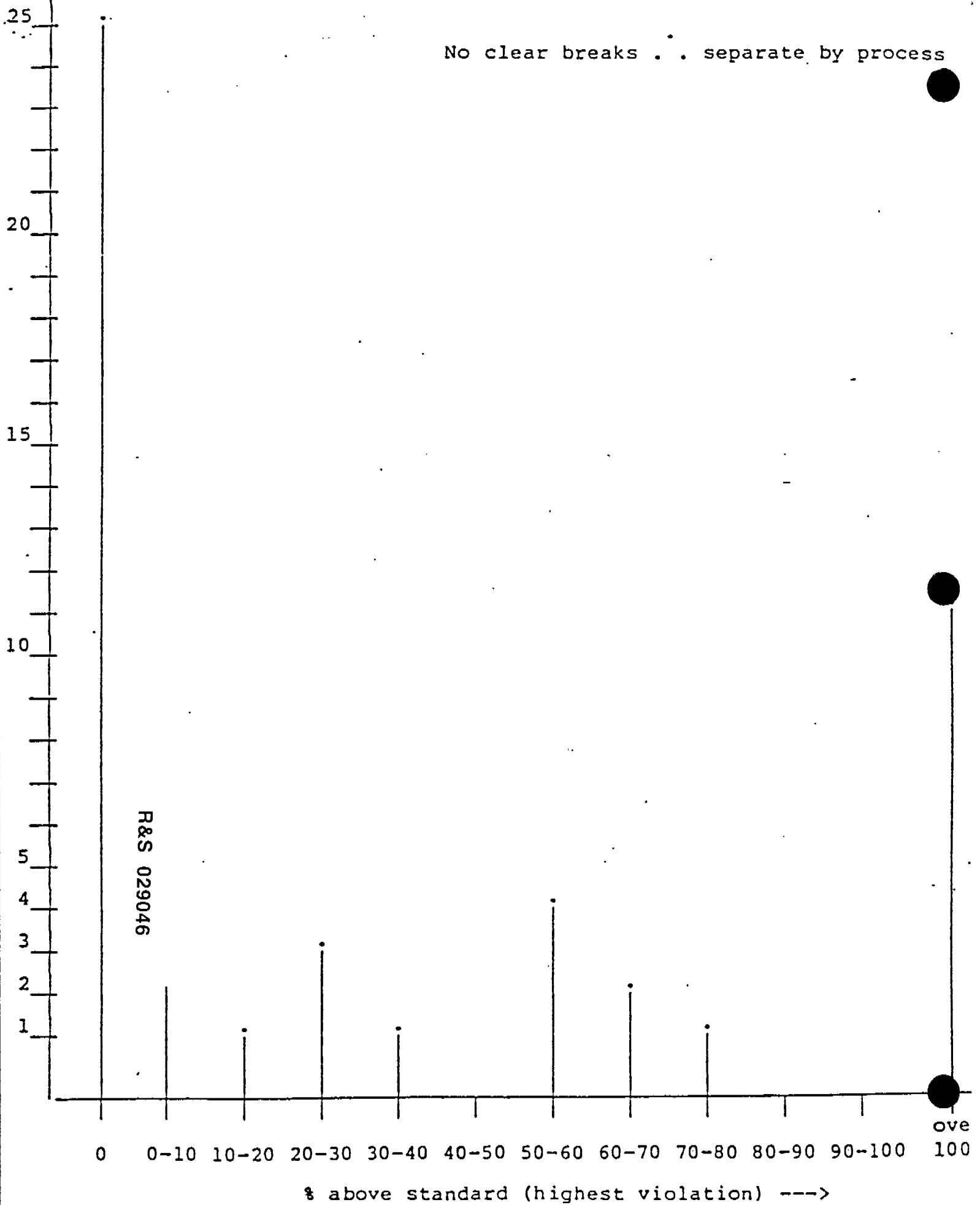
% of violations ---->



(magnitude of violations)

No clear breaks . . separate by process

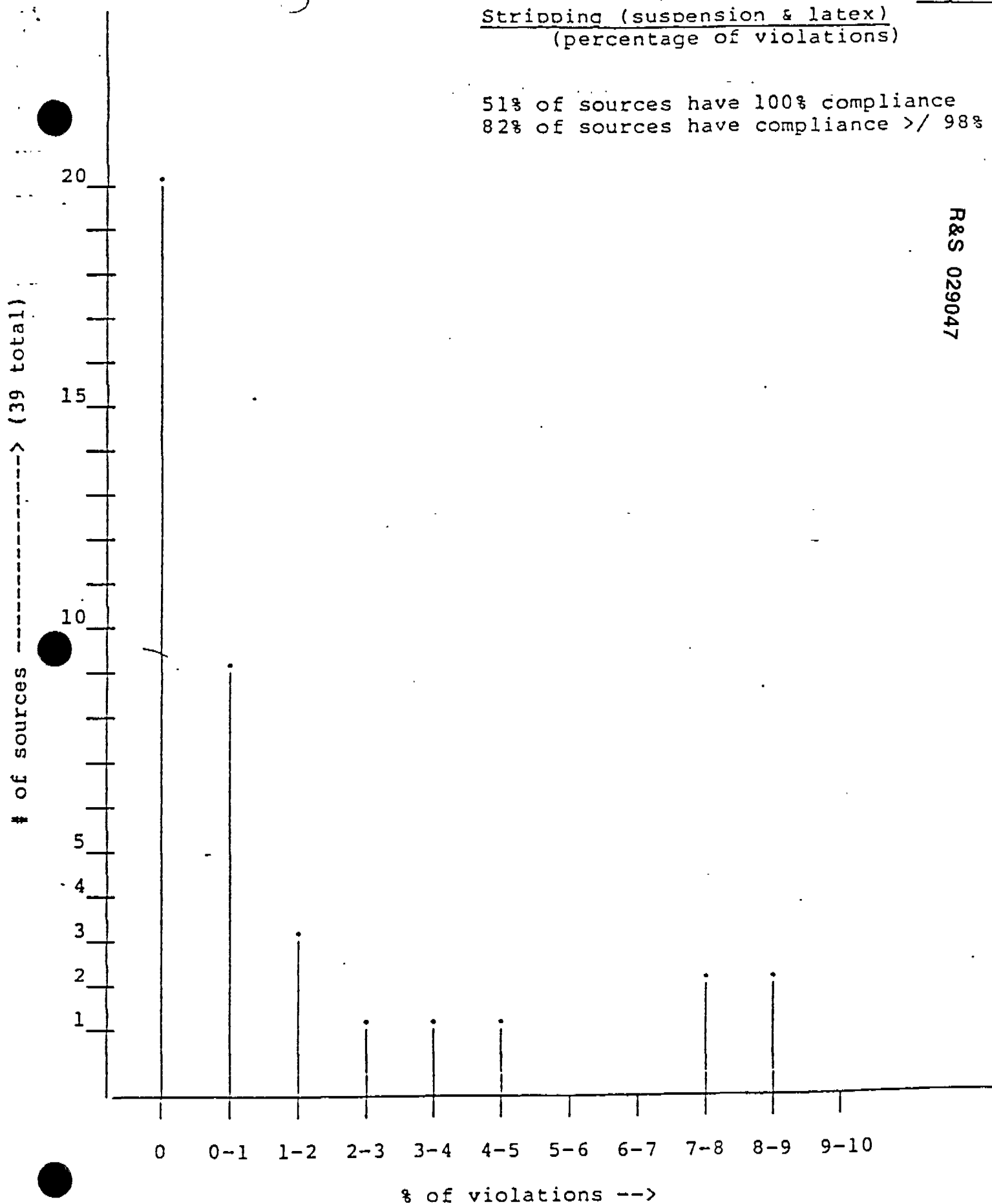
R&S 029046



Stripping (suspension & latex)  
(percentage of violations)

51% of sources have 100% compliance  
82% of sources have compliance > 98%

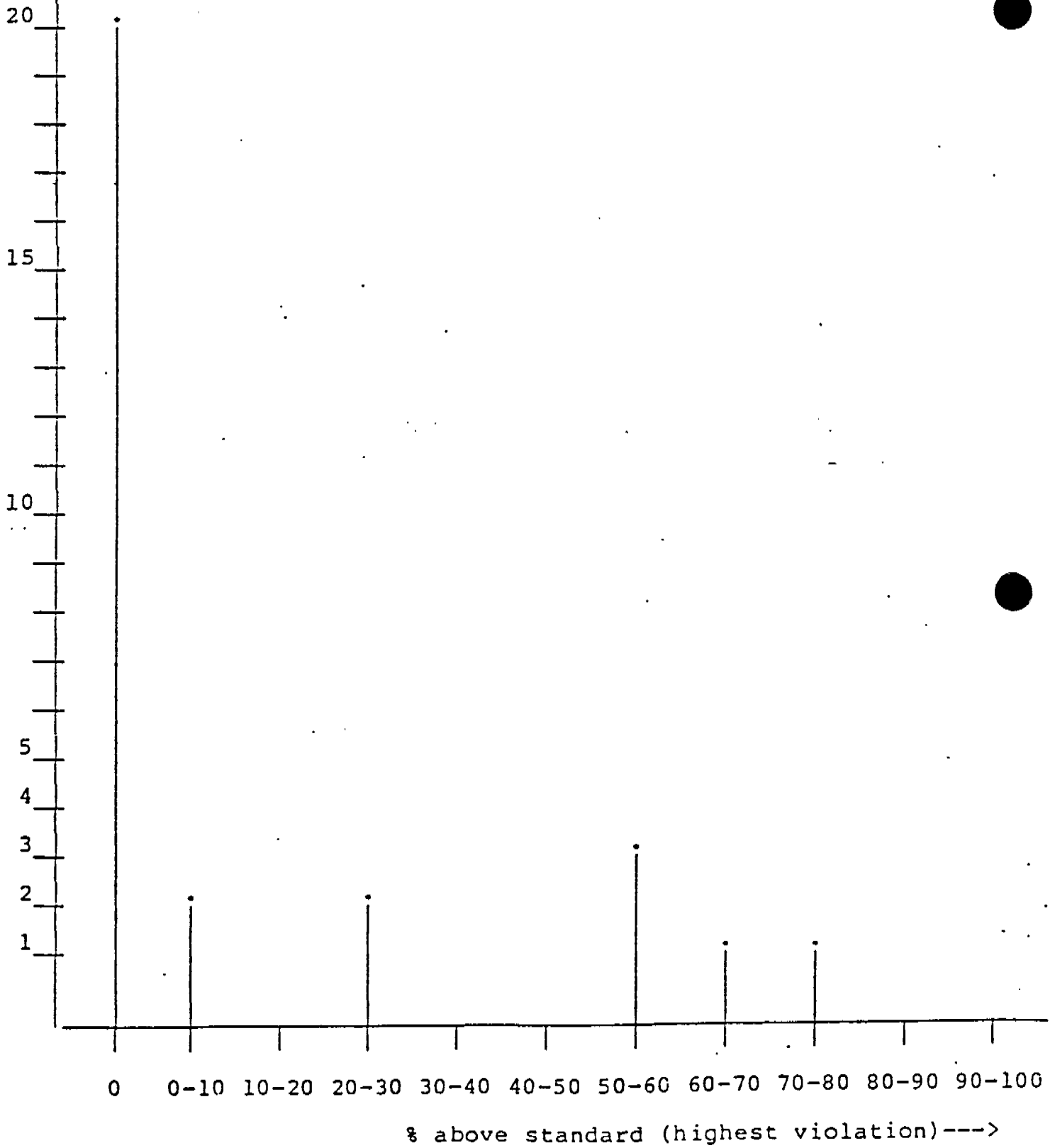
R&S 029047



56% of sources within 10% of standard  
26% gross violations (over 100%)

# of sources <----- (39 total)

R&S 029048

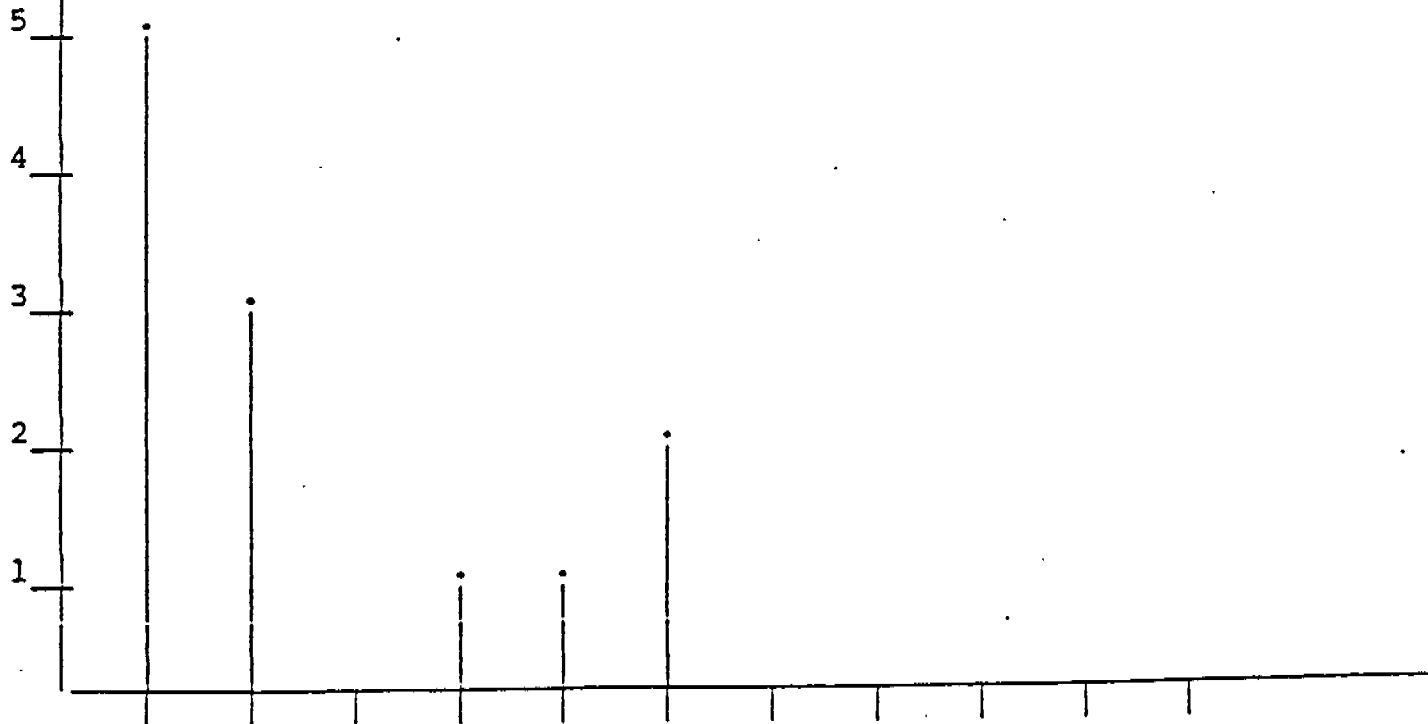


Stripping (dispersion)  
(percentage of violations)

42% of sources have 100% compliance  
67% of sources have compliance > 98%

R&S 029049

(12 total)  
-----  
# of sources



0 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10

% of violations --->

Stripping (dispersion)  
(magnitude of violations)

50% of sources within 10% of standard

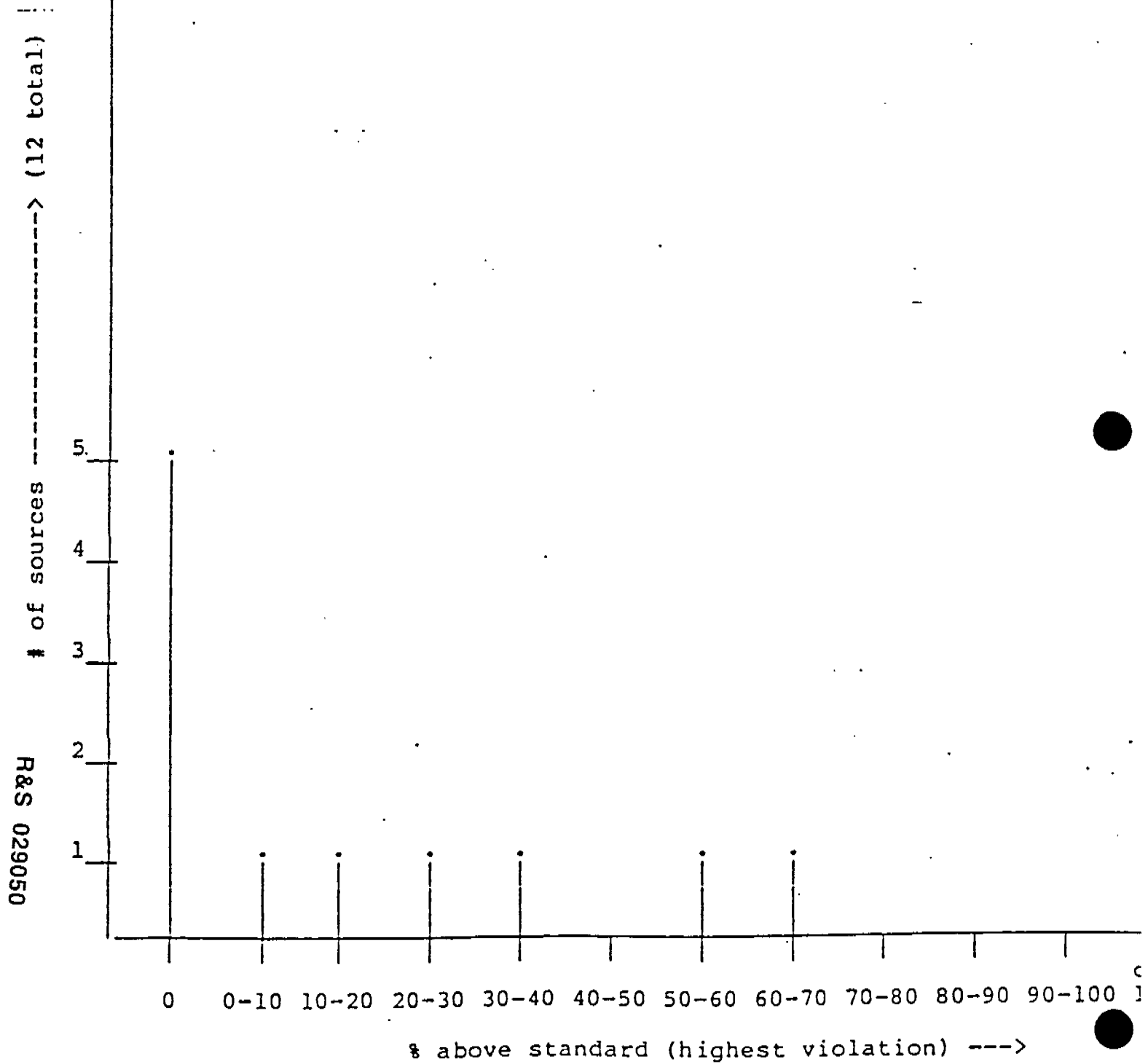
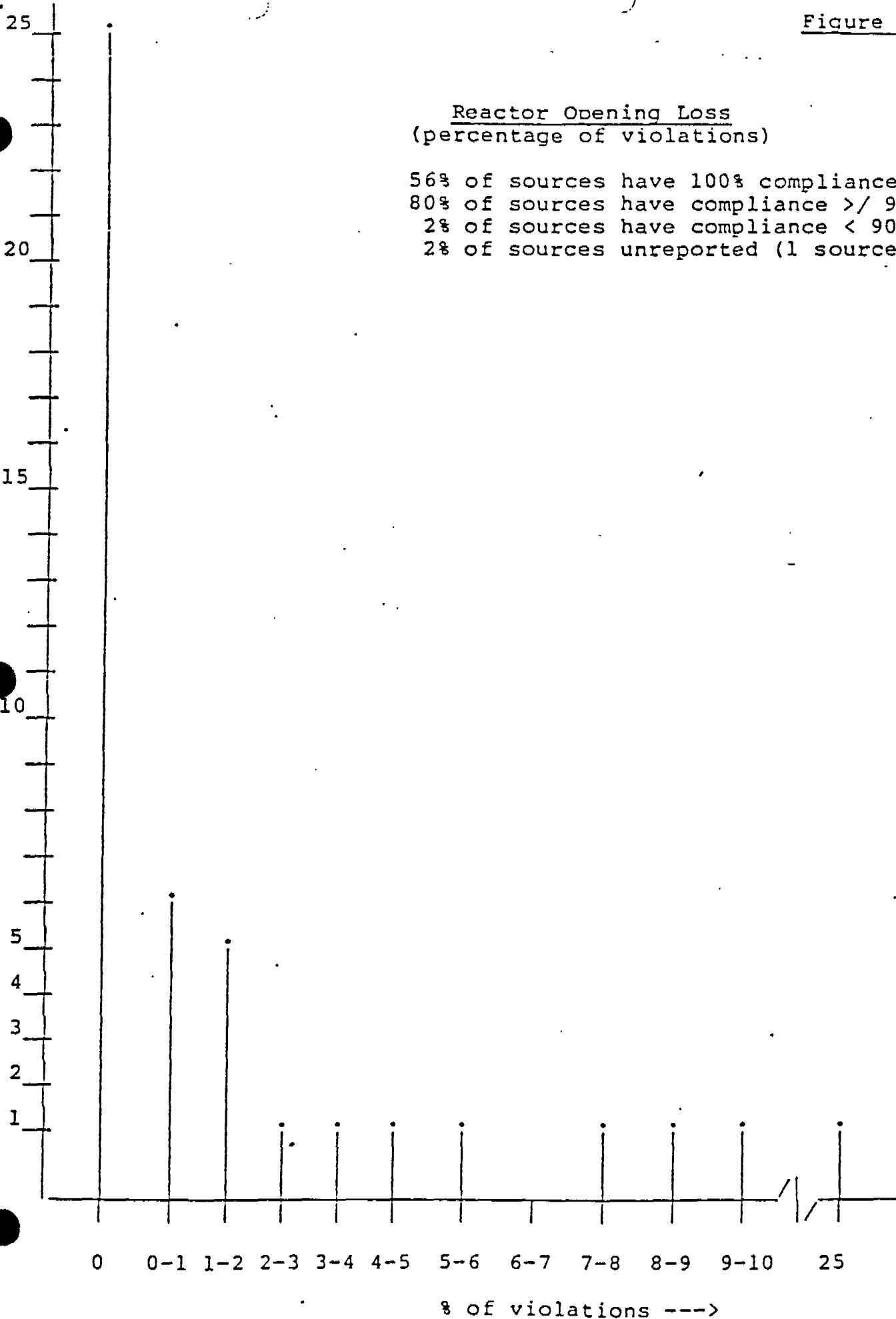


Figure 7

Reactor Opening Loss  
(percentage of violations)

56% of sources have 100% compliance  
80% of sources have compliance  $\geq$  98%  
2% of sources have compliance  $<$  90%  
2% of sources unreported (1 source)

# of sources ---> (45 total)



R&S 029051

Reactor Opening Loss  
(magnitude of violations)

62% of sources within 25% of standard  
24% gross violations (over 100%)  
4% of sources unknown/unreported (2 sources)

# of sources ---> (45 total)

20  
15  
10  
5  
4  
3  
2  
1

0 0-10 10-20 20-30 30-40 40-50 50-60 60-70 70-80 80-90 90-100 100

% above standard (highest violation) --->

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

20

1

5

10

15

TABLE 2: Enforcement Priorities

|                              | <u>Stripping</u><br>(suspension and<br>latex)<br>(400 ppm) | <u>Stripping</u><br>(dispersion)<br>(2000 ppm) | <u>Reactor</u><br><u>Opening</u><br><u>Loss</u> |
|------------------------------|------------------------------------------------------------|------------------------------------------------|-------------------------------------------------|
| Percentage of<br>compliance* | <98%                                                       | <98%                                           | <98%                                            |
| Magnitude of<br>violations*  | 10% above<br>standard                                      | 10% above<br>standard                          | 25% above<br>standard                           |

Additional factors for enforcement:

1. No (or incomplete) reporting of violations
2. Repeated pattern of violations
3. Lack of attempts to remedy problem
4. Ability to remedy problem (identification of specific remedial measures)
5. Increasing (or constant) frequency & severity of violations
6. Comparison with other sources in Region
7. Industry trends
8. Actual or potential environmental harm/population exposure

\* Generally, either factor is sufficient to prioritize a source for enforcement action. See page 4 of strategy.

R&S 029053

TABLE 3: Current % of facilities targetted for enforcement action

|                      |   | <u>Stripping</u><br>(suspension, latex) | <u>Stripping</u><br>(dispersion) | <u>Reactor</u><br><u>Opening Loss</u> | <u>Tot</u> |
|----------------------|---|-----------------------------------------|----------------------------------|---------------------------------------|------------|
| <u>Nationwide</u>    | % | 19% (7)                                 | 11% (4)                          | 22% (8)                               |            |
| (36 facilities) Mag. |   | 22% (8)                                 | 8% (3)                           | 28% (10)                              | 44         |
| <u>Region 1</u>      | % | 0%                                      | ---                              | 0%                                    |            |
| (1 facilities) Mag.  |   | 0%                                      | ---                              | 0%                                    | 0          |
| <u>Region 2</u>      | % | 14% (1)                                 | 14% (1)                          | 29% (2)                               |            |
| (7 facilities) Mag.  |   | 14% (1)                                 | 0%                               | 14% (1)                               | 57         |
| <u>Region 3</u>      | % | 50% (2)                                 | 75% (3)                          | 25% (1)                               |            |
| (4 facilities) Mag.  |   | 50% (2)                                 | 75% (3)                          | 50% (2)                               | 75         |
| <u>Region 4</u>      | % | 20% (1)                                 | ---                              | 0%                                    |            |
| (5 facilities) Mag.  |   | 20% (1)                                 | ---                              | 0%                                    | 20         |
| <u>Region 5</u>      | % | 20% (1)                                 | 0%                               | 0%                                    |            |
| (5 facilities) Mag.  |   | 20% (1)                                 | 0%                               | 0%                                    | 0          |
| <u>Region 6</u>      | % | 18% (2)                                 | 0%                               | 45% (5)                               |            |
| (11 facilities) Mag. |   | 27% (3)                                 | 0%                               | 64% (7)                               | 64         |
| <u>Region 9</u>      | % | 0%                                      | ---                              | 0%                                    |            |
| (3 facilities) Mag.  |   | 0%                                      | ---                              | 0%                                    | 0          |

OTE: Facilities are only targeted under "magnitude of violation" if they have less than 99% compliance.

TABLE 4: Penalty Scheme

The following factors should be used to determine a penalty settlement figure:

- seriousness of violation (gravity component)
- degree of willfulness or negligence
- degree of cooperation or non-cooperation
- history of non-compliance or steady improvement
- ability to pay
- economic savings of noncompliance (if a specific piece of equipment can be identified as a necessary remedial measure)
- other unique factors.

The chart below is to be used to assess the gravity component of the penalty:

Relief Valve Discharges, Manual Vent Valve Discharges, Violations of 10 ppm Standards

Violations

Pounds of VC released

Penalty

|             |        |
|-------------|--------|
| 0-1000      | \$1000 |
| 1-2000      | 2000   |
| 2-3000      | 3000   |
| 3-4000      | 4000   |
| 4-5000      | 5000   |
| 5-7500      | 10,000 |
| 7500-10,000 | 15,000 |
| 10-12,500   | 20,000 |
| over 12,500 | 25,000 |

R&S 029055

Failure to Report

Start with:

Size of Release not Reported (lbs)

Penalty

|           |        |
|-----------|--------|
| 0-100     | 2000   |
| 100-500   | 5000   |
| 500-1000  | 10,000 |
| 1000-2000 | 20,000 |
| over 2000 | 25,000 |

Graduated scale for late reporting (if not in response to direct request from State or EPA) - 10-day discharge reports

|                                  |                |
|----------------------------------|----------------|
| Within 2 months (from discharge) | 25% of penalty |
| 2-4 months                       | 50% " "        |
| 4-6 months                       | 75% " "        |
| over 6 months                    | 100% " "       |

Stripping Violations and Reactor Opening Loss Violations

Stripping

| <u>Magnitude of Violation</u> |                   | <u>Penalty</u> |
|-------------------------------|-------------------|----------------|
| <u>Suspension/Latex</u>       | <u>Dispersion</u> |                |
| 400-500 ppm                   | 2000-2500ppm      | \$1000         |
| 500-600                       | 2500-3000         | 2000           |
| 600-700                       | 3000-3500         | 3000           |
| 700-800                       | 3500-4000         | 4000           |
| 800-900                       | 4000-4500         | 5000           |
| 900-1200                      | 4500-6000         | 10000          |
| 1200-1400                     | 6000-7000         | 15000          |
| 1400-1600                     | 7000-8000         | 20000          |
| Over 1600                     | Over 8000         | 25000          |

Reactor Opening Loss

Penalty = \$1000/violation (for each reactor)

Failure to Measure

Penalty = Maximum penalty amount for each type of violation  
 = \$25000 (stripping)  
 = \$1000 (reactor opening loss)

Failure to Submit Complete Semiannual Report

Penalty = \$25000

Graduated scale for late reporting (if not in response to direct request from State or EPA)

|                 |                |
|-----------------|----------------|
| Within 2 months | 25% of penalty |
| 2-4 months      | 50% " "        |
| 4-6 months      | 75% " "        |
| Over 6 months   | 100% " "       |

Generally, this penalty scheme should be adhered to (with relatively minor adjustments) for the majority of cases. When a source would be subject to an unusually large penalty (e.g. \$500,000 for a single type of violation), Regional Offices will have greater discretion in setting penalties provided that the figure is at least \$500,000.