

Research Trends and Results

Results of Research Regarding Complaints of Residents Associated with Building Use and Countermeasures against its Effects on Surrounding Areas

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1. Introduction

In operation of building use restrictions in group provisions of Building Standard Law, it is important to take measures against effects of building use on surrounding areas by knowing the physical effect characteristics of each building use to prevent effectively environment degradation of the urban district that is associated with the physical effect of building use (especially disadvantageous effect on surrounding areas such as noise and foul odors). To do that, it is effective to analyze complaints that come from neighborhood residents to the local government's environment division for noise and foul odor that are associated with business and operation of each building use and the content of specific administrative guidance for those complaints.

2. Research summary

The total analysis has been done by receiving data (8,514 valid samples) regarding complaints of residents that are associated with business and operation of the building use, offered from environment divisions in 20 cities across the country where we received the cooperation for the research. With doing a total analysis for pollution-causing characteristic of each building use (pollution by type, occurrence factor, etc.), tendency of high complaint building use in each use district provided under City Planning Law, and measurement of physical effect (noise level, etc.), the specific countermeasures against effects to surrounding areas taken for pollution source origin and cause has been extracted and sorted out. Examples of the results are indicated in Fig.1-4. Please see reference 1 for the details of the research results.

3. Conclusion

The research results are expected to be used as a basic data for consideration of technical criterion (provisory permission standards on Article 48 of Building Standard Law) and / or reconsideration of contents of the restrictions on building use in Appendix 2 of Building Standard Law and district plan.

Reference

- 1) NILIM Urban Planning Department (2012) "Report for the research regarding complaints of residents associated with building use and countermeasures against its effects on surrounding areas" <http://www.nilim.go.jp/lab/jeg/kujou.pdf> (Japanese only)

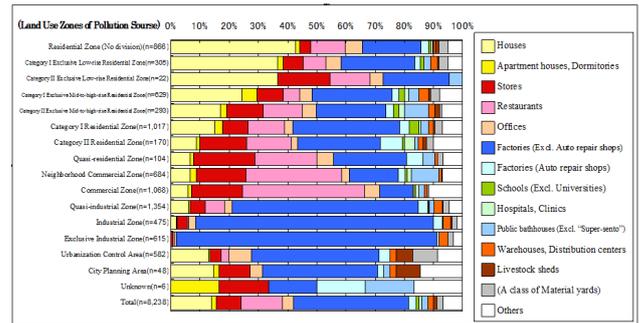


Fig. 1. Component ratio of complaints classified by Land Use Zone and building use of pollution source

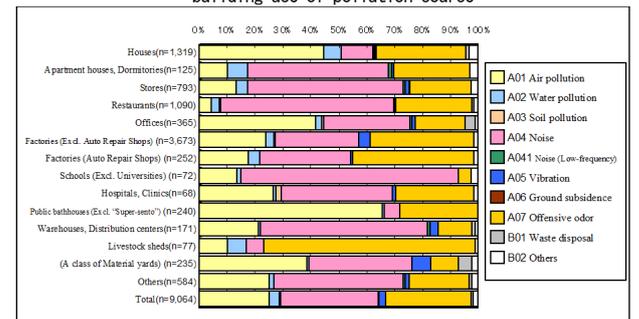


Fig. 2. Component ratio of complaints classified by building use and type of pollution

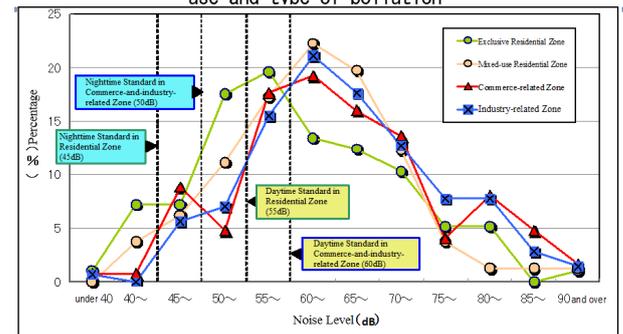


Fig. 3. Distribution of noise complaints by Land Use Zone

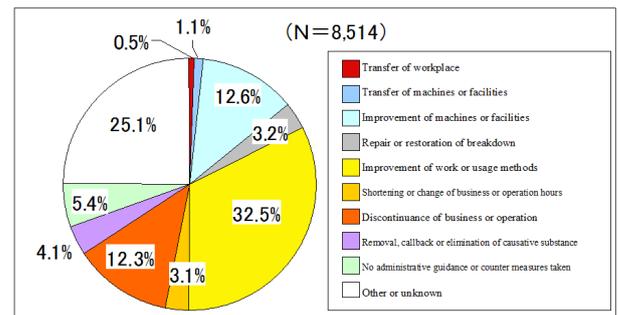


Fig. 4. Component ratio of complaints by countermeasure against pollution source