The 3rd World Sustainability Forum

Sustainable Urban Development (Section E).

«Industrial Risk in Thessaloniki and Urban Regeneration Context»

Christine Matikas
Communal Directives
For prevention, preparedness and response of Industrial Accidents

Seveso I (82/501/CEE, 87/216/CEE, 88/610/CEE), Greece 1988
Seveso II (96/82/CE), Greece 2000
Seveso III (2003/105/CE), Greece 2007
«Industrial Risk in Thessaloniki and Urban Regeneration Context»

The Region of Central Macedonia in Greece.
«Industrial Risk in Thessaloniki and Urban Regeneration Context»
The Regional Unit of Thessaloniki inside Region of Central Macedonia
«Industrial Risk in Thessaloniki and Urban Regeneration Context»
Industrial Zone of Thessaloniki and Industrial Installations inside the suburban zone
«Industrial Risk in Thessaloniki and Urban Regeneration Context»
Municipality of Eleftherio Kordelio, the region in the greatest threat in Thessaloniki
The Urban Units 4 and 5 of Eleftherio Kordelio, included in the Protection Zones I (red) et II (yellow).
«Industrial Risk in Thessaloniki and Urban Regeneration Context»
The urban paradox of residential coexistence with the industrial risk – threat
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Protection Zones

Vulnerability Diagram: the protection zones I, II and III
«Industrial Risk in Thessaloniki and Urban Regeneration Context»

Industrial Risk – Thessaloniki, Greece

Connotation:

Specific Parameters for every city
Institutional Maturity and National Policy

influence

the relationship of dangerous industrial establishments and urban fabric

and the relationship between the Industrial Risk and the consequences of a Major Accident
«Industrial Risk in Thessaloniki and Urban Regeneration Context»
The SEVESO Establishments in Thessaloniki
Municipalities affected by industrial risk:

1. Delta Axiou (municipal unit of Echedoros)

2. Kordelio – Evosmos (municipal unit of Eleftherio Kordelio)

3. Ampelokipi – Menemeni

in Matikas, 2012, p.118
Concentration of SEVESO installations (mainly ELPE) in Echedoros and E. Kordelio (in red).
The Urban Units 4 and 5 and the existing land uses

SEVESO Installations – Heavy industry (in mauve), artisan (in lilac), public space – green space (in green), local centers (in red), the rest is housing
«Industrial Risk in Thessaloniki and Urban Regeneration Context»
Redaction of the Urban Regeneration Context for the Urban Units 4 and 5 of E. Kordelio
The Urban Units 4 and 5 of Eleftherio Kordelio, included in the Protection Zones I (red) et II (yellow).
«Industrial Risk in Thessaloniki and Urban Regeneration Context»
Proposition of the Urban Regeneration Plan – Protection Zones

SEVESO installations – Heavy industry (in mauve), artisan (in lilac), public space – green space (in green), the rest is housing (mixed housing)
List of SEVESO establishments in the regional unit of Thessaloniki, for which the external emergency plans were developed (2004), and those covered by the Directive SEVESO II (HTL, high threshold and low threshold 2008)

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*Source: Région Macédoine Centrale, Bureau de Protection Civile.
**Source: Région Macédoine Centrale, Département des Entreprises Industrielles et du Développement

in Komninos, p.262
Vulnerability Diagram: the protection zones I, II and III
Conflagration in «JET OIL» in Kalohori, Thessaloniki, on February the 24th of 1986

http://ecology-salonika.org/2010/02/24/jet-oil-25-years-after/
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The Major Industrial Accident in «PETROLA» in Athens on September the 1st of 1992 (13 deaths and 15 wounded)

The proximity of new residential buildings to SEVESO installations
Risk management is not a fact and it must not be taken for granted

The accident in Sandoz installations in Switzerland (1986). Rhin Contamination

The explosion in Toulouse on September the 21st of 2001
Risk management is not a fact and it must not be taken for granted
The installation of new SEVESO industries or their relocation to an industrial district organized under a modern planning in a sufficient distance from the urban fabric, in a territory selected with criteria that allow the optimal service of the necessary networks and their economic development, does not mean that their vulnerability is fundamentally eliminated.

Even if dispersion models are used, no prediction could be made, concerning where toxic substances will head, nor which the consequences of a leak in the ground and thus underground water and the food chain would be.

Even more, the impact of an industrial accident in the environment (fauna, flora, wetlands, coastal areas, protected areas and ecosystems) has not been adequately studied both in short and long-term.

Risk management is not a fact and it must not be taken for granted.

It is finally time for progress to get another form, based on renewable energy and sustainability, while changing the way we design and plan urban space.
Delta Aliakmon – Loudias – Axios - Gallikos (site NATURA 2000)

http://history-pages.blogspot.gr/2012/02/11.html

http://www.axiosdelta.gr/
Thank you for your attention

This thesis was presented in Paris, June 26 2012,
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DSA en Architecture et Projet Urbain, option «Projet Urbain - Métropolisation»

under the supervision of prof. Bendicht Weber

under the title (Sujet de mémoire): «Le Risque Industriel à Thessaloniki. Proposition d’un Cadre de Régénération Urbaine Appropriée»