

Baseline report in accordance with IED – NICOLE WS 2014 BERLIN

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Contents of this presentation

- Introduction to European Commission Guidance baseline reports
- Introduction to Dutch guidance to baseline reports
- Limitations of Dutch guidance for large industrial sites
- Defining alternative approach



Baseline report (IED)

- Article 22 (1) of Directive 2010/75/EU on industrial emissions
- Basis for comparison with state upon cessation activities
- Provide information on state of contamination by relevant hazardous substances (article 3(19))
- Information (article 22(2)):
 - Present use of the site (and when available past uses)
 - ***Existing information that reflect the state or new measurements***



Main stages of preparing baseline report:

1. Identify which hazardous substances are used
2. Identify **relevant** hazardous substances
3. Identify actual possibility for contamination
4. Provide site history (present use and previous uses)
5. Identify site's environmental setting
6. Identify existing pollution
- 7. *Collect additional information***
8. Produce baseline report



Introduction to Dutch guidance to baseline reports

- Baseline reports and collecting additional information have been common practice in NL for several decades under the Environmental protection act (*Wm*)
 - NRB (Dutch guideline soil protection): strategy for defining potentially suspect sublocations (stage 1 and 3)
 - NEN 5740 guideline for baseline studies, sampling strategy (stage 7)

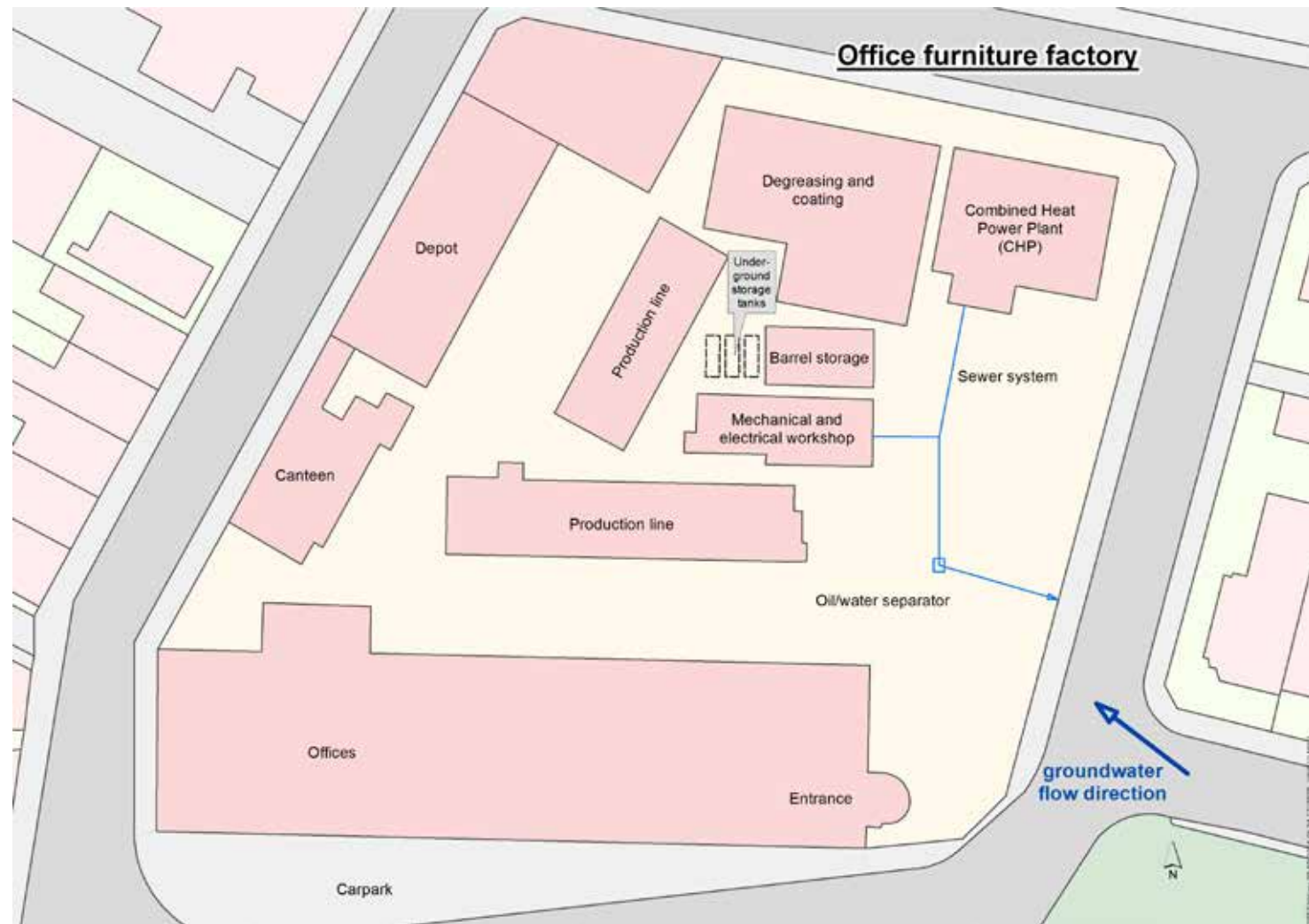


Limitations of Dutch guidance for large industrial sites

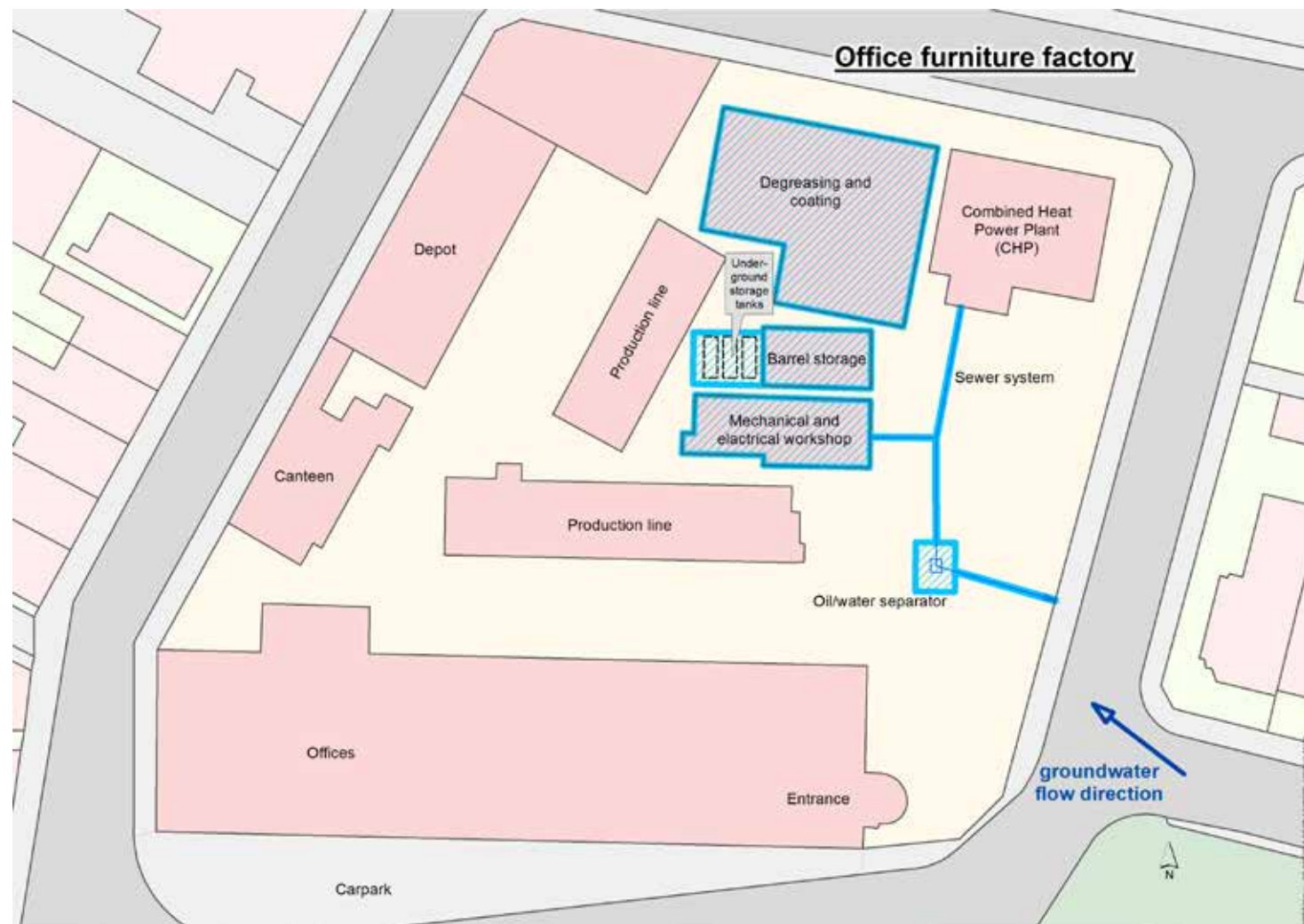
- NEN 5740 sampling strategy works very well for small to medium industrial sites (few ha, few dozen activities/sublocations)
- Upscaling of NEN 5740 to large industrial sites (up to several dozen ha and up to several hundreds of activities/sublocations) leads to:
 - excessive soil surveys
 - no good understanding of the baseline at the site due to overkill of data
 - excessive costs



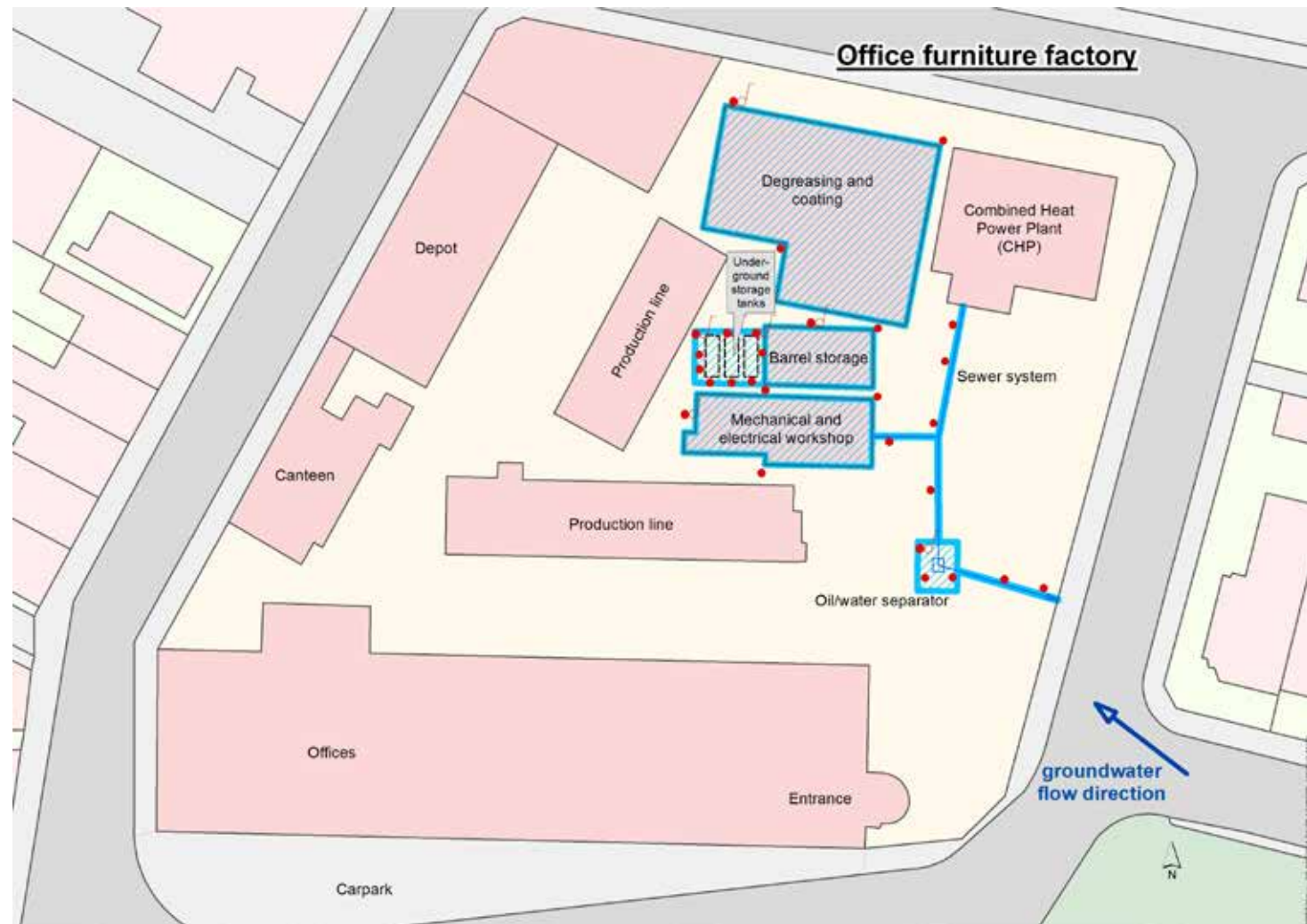
Baseline sampling strategy small – medium scale industrial site; Overview



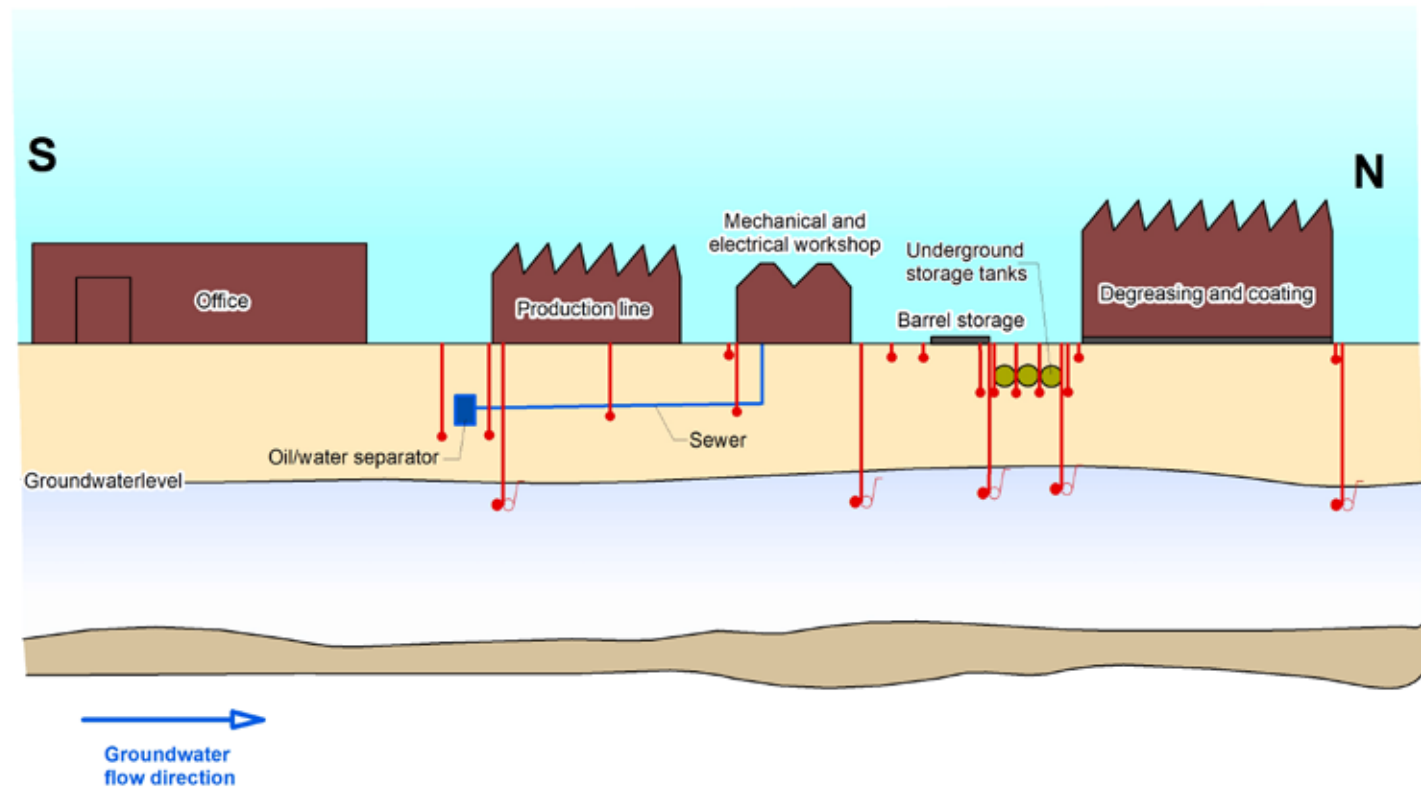
Small – medium scale industrial site; identifying potentially suspect sublocations



Small – medium scale industrial site; Sampling strategy according to NEN 5740



Small – medium scale industrial site; Sampling strategy cross section



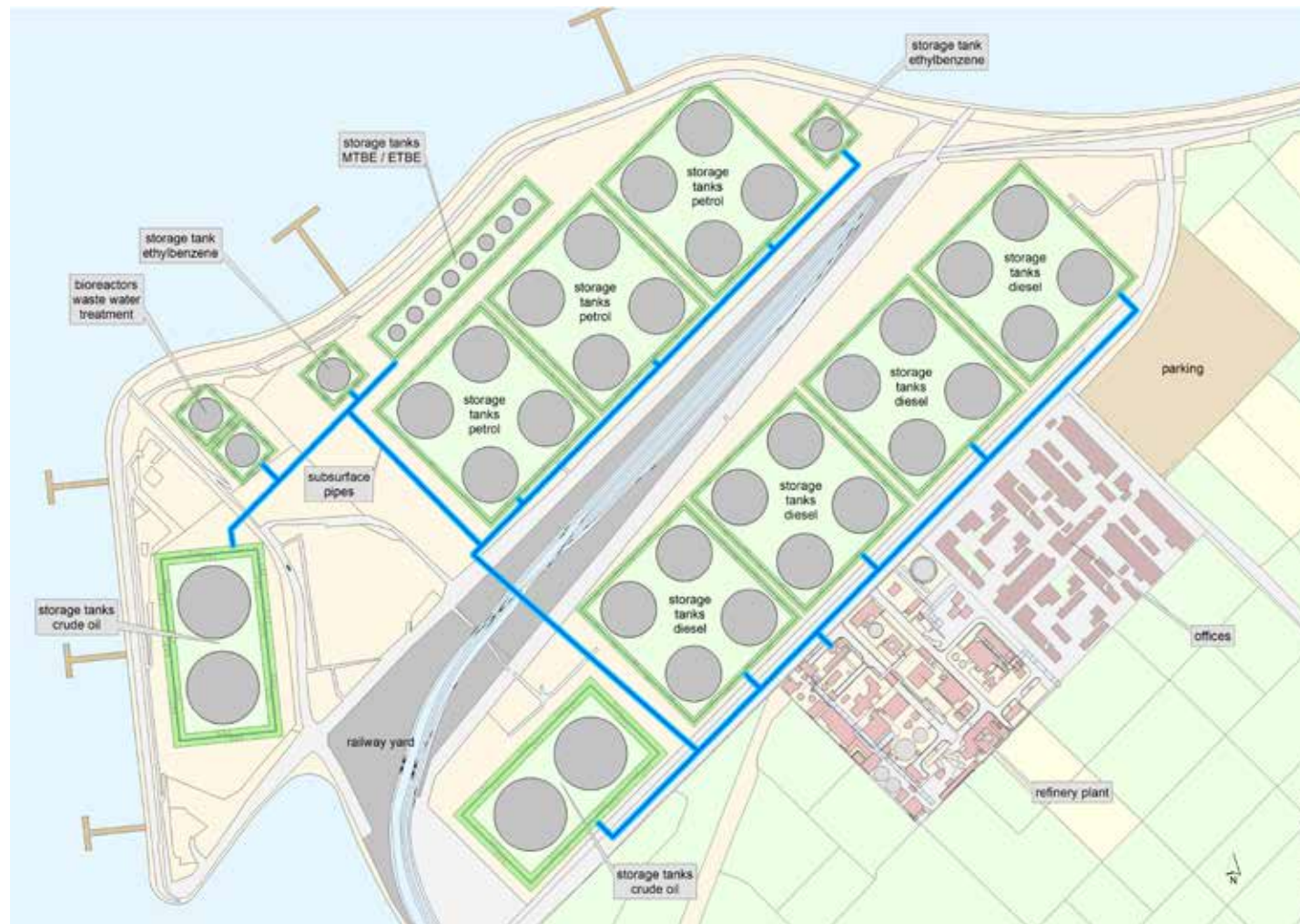
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Alternative sampling strategy approach for large scale industrial sites

- Points of departure for alternative sampling strategy approach:
 - must lead to a good understanding of the baseline
 - must be approved by competent authorities
 - soil survey of manageable proportions
- Alternative sampling strategy approach:
 - Regarding clusters of activities with the same hazardous substances instead of single activities
 - Defining of spatial units
 - Soil survey performed on spatial units using large scale sampling strategy

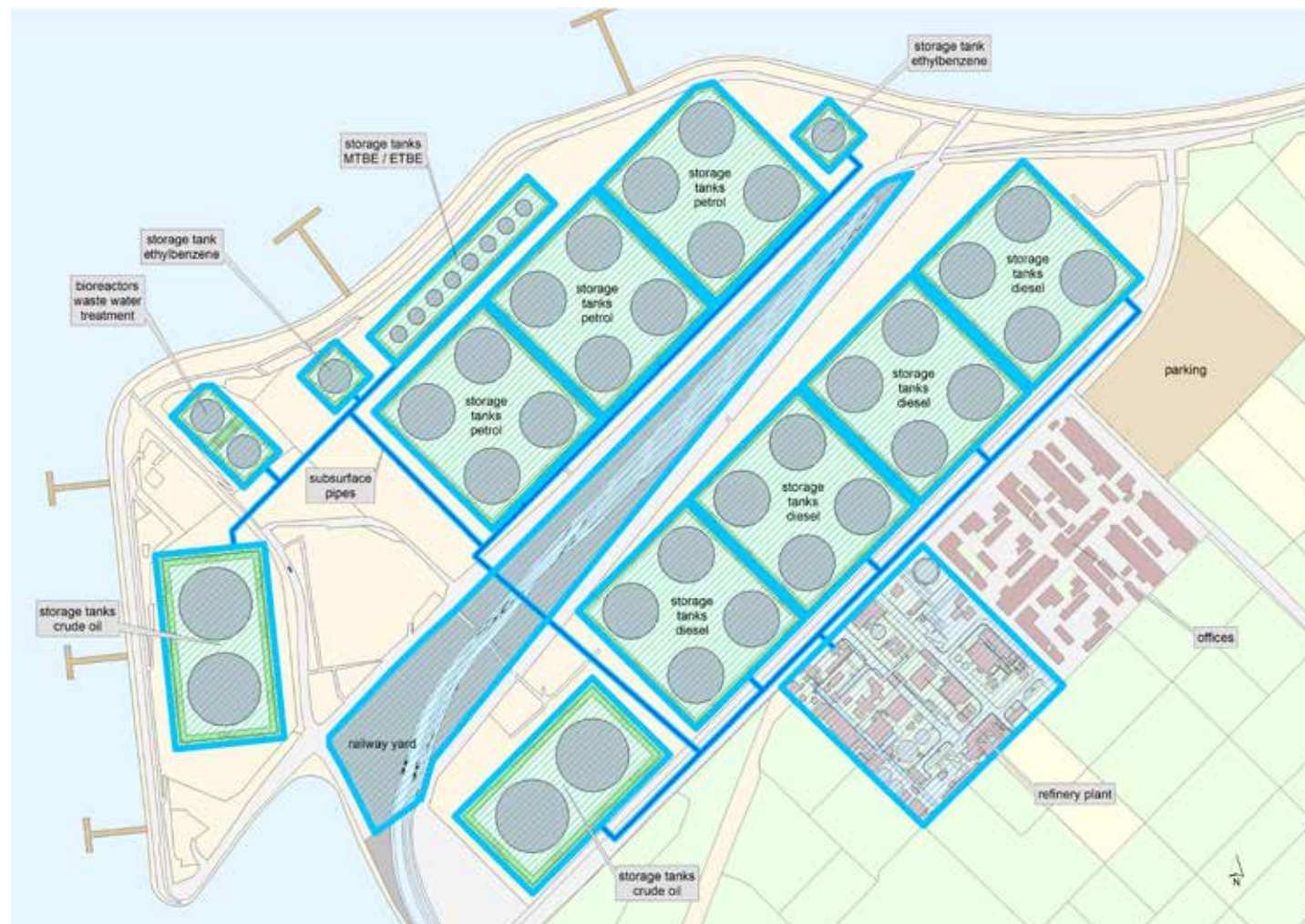


Baseline strategy large scale industrial site; Overview



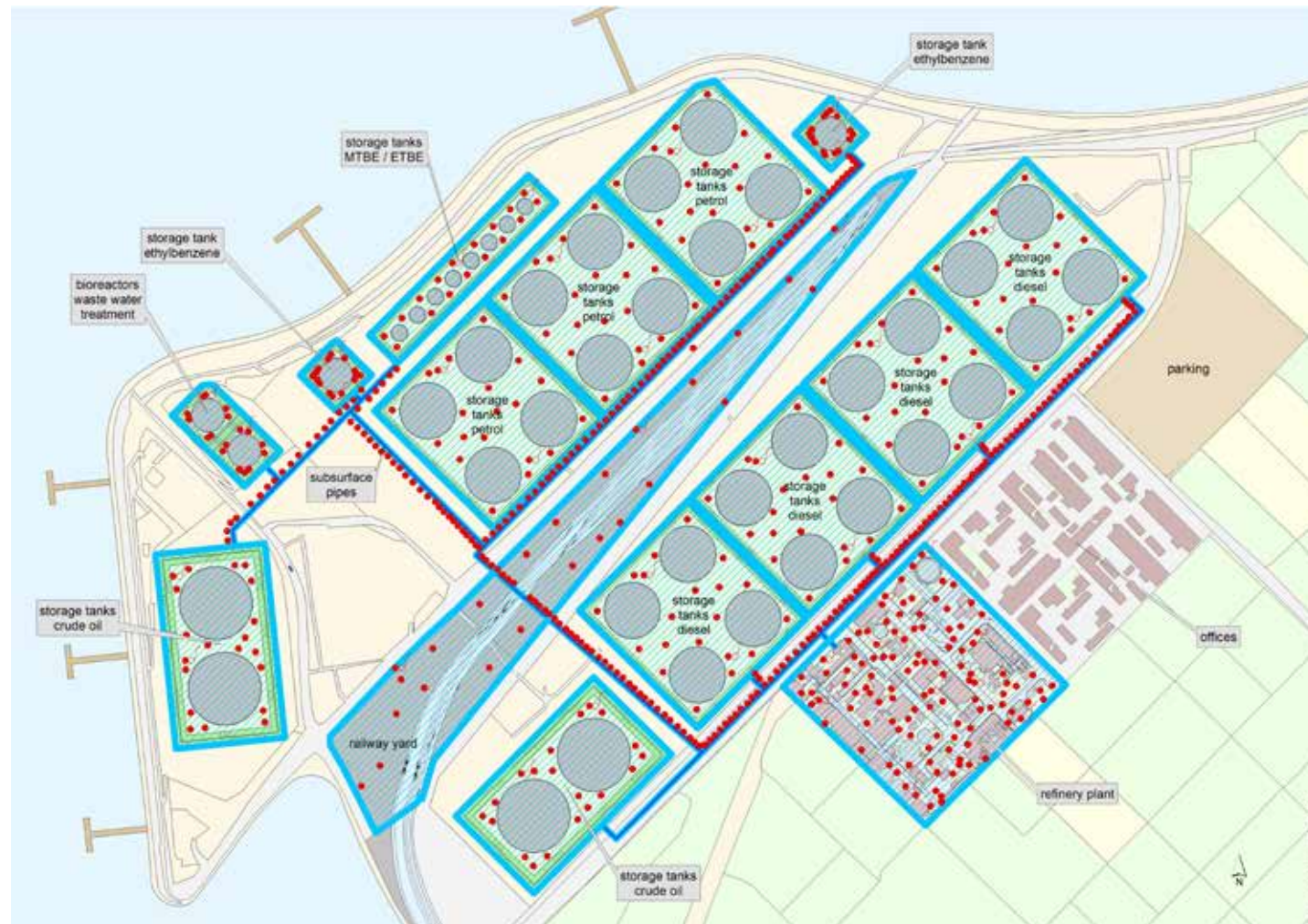
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Large scale industrial site; Potentially suspect sublocations



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Large scale industrial site, Sampling strategy according to NEN 5740



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Large scale industrial site, Defining of spatial units



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Large scale industrial site, Large scale sampling strategy



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Large scale industrial site, Use of existing soil data



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Alternative approach for large scale industrial site; discussions with authorities

- Use of historic soil data
- Baseline LNAPL's
- Identifying relevant hazardous substances
- Testing values hazardous substances
- Obstacles, impermeable floors and safety regulations
- Dynamic site use with different relevant hazardous substances

Leads to:

Strategy baseline document for large scale industrial sites



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Strategy baseline document for large scale industrial site

- Applied and approved of by competent authorities at several sites:
 - Several large oil companies in the Port of Rotterdam
 - Industrial site/ chemical container terminal (Port of Rotterdam)
 - Railway yard in the west of the Netherlands
- Benefits achieved:
 - Good understanding of baseline according to IED
 - Limited time frame
 - Substantial costs reduction
 - Avoiding discussions with authorities after baseline report



Thanks for your attention



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