Navigating the Path to Sustainable Soil Remediation

‘Reflections and learnings from overseas’

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Gaia Environmental

Scene Setting

Making a case within consenting

Blue sky thinking - ‘long term site management’ – Case study

Scene Setting

1. Remediation of former below ground gas holder

2. Overflow of liquid contaminants into residential garden

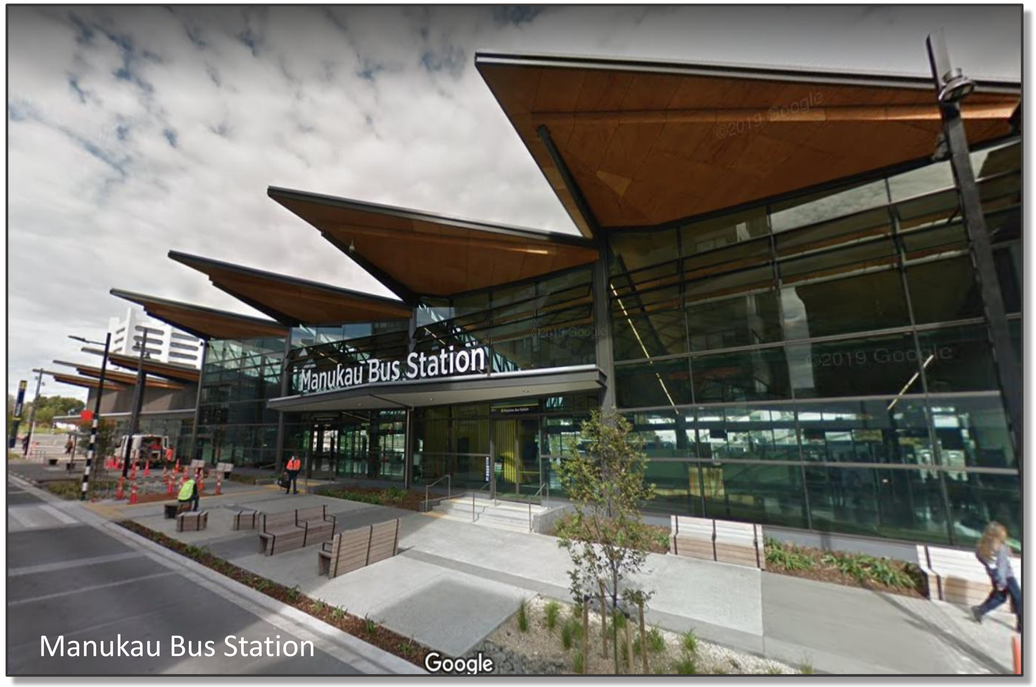
3. Excavation of bgh plus soils from garden

4. Lower classification contaminated garden soil encapsulated within the bggh.

5. Introduction of landfill tax and restriction on sites able to accept such wastes with deadline.

Constraints - Post disposal restrictions

Excess onsite soil management
Minimisation of off-site disposal and costs
Creative use of soil movement into less sensitive locations within development\ land
- below roading or slabs



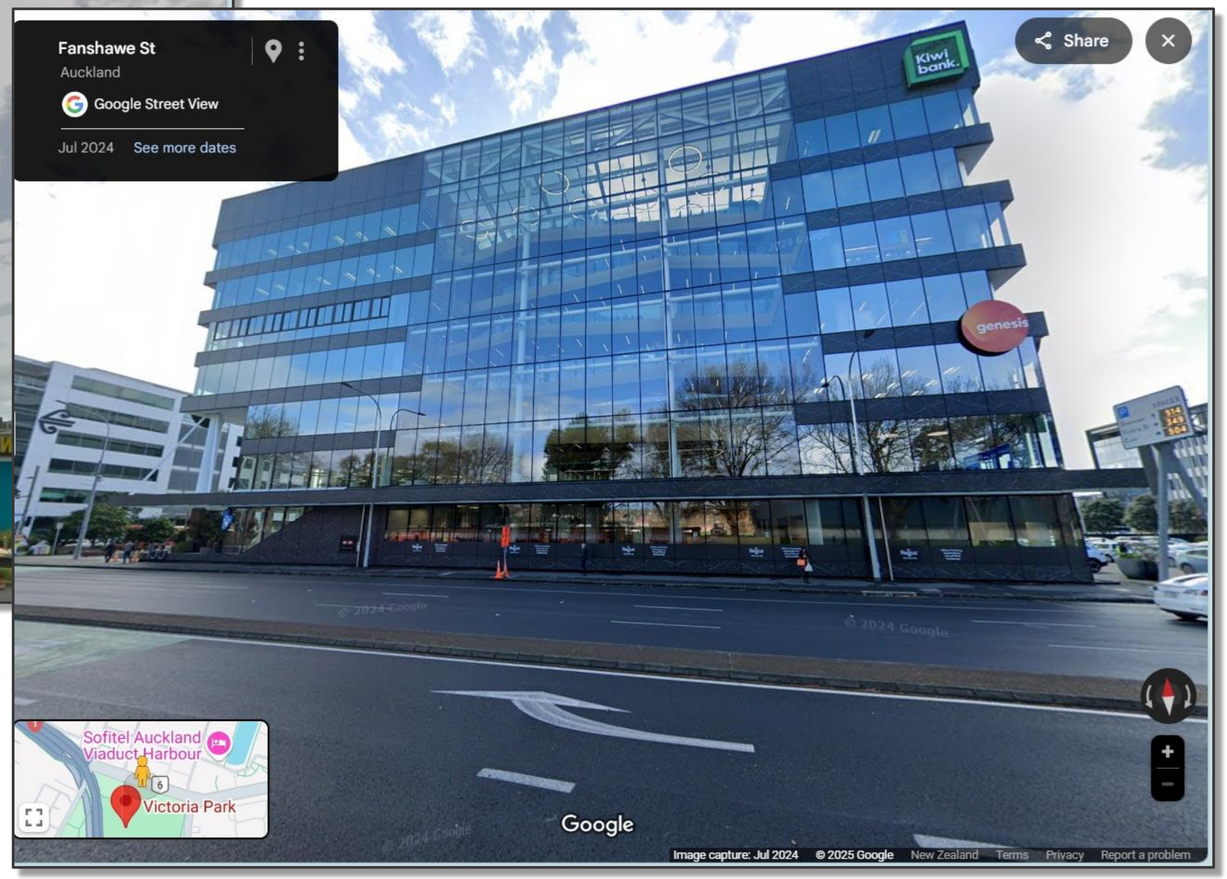

Olympic Park, London


Olympic Park, London

Creative re- use of surplus soil on site

- increased use of ‘landscaping’ in residential developments
- creation of public open (recreational) space

Of course, in the end it's all about the $$$$



Making a case in consenting

NES

Councils are naturally conservative

The RMA and NES cannot be reinterpreted – if it determines a consent is necessary the council are unlikely to entertain making their own unsupported decision not to apply a consent

Mostly applied by planners who rely on the text of the Regulations and Guidance

– they are not contaminated land specialists nor risk assessors

NES

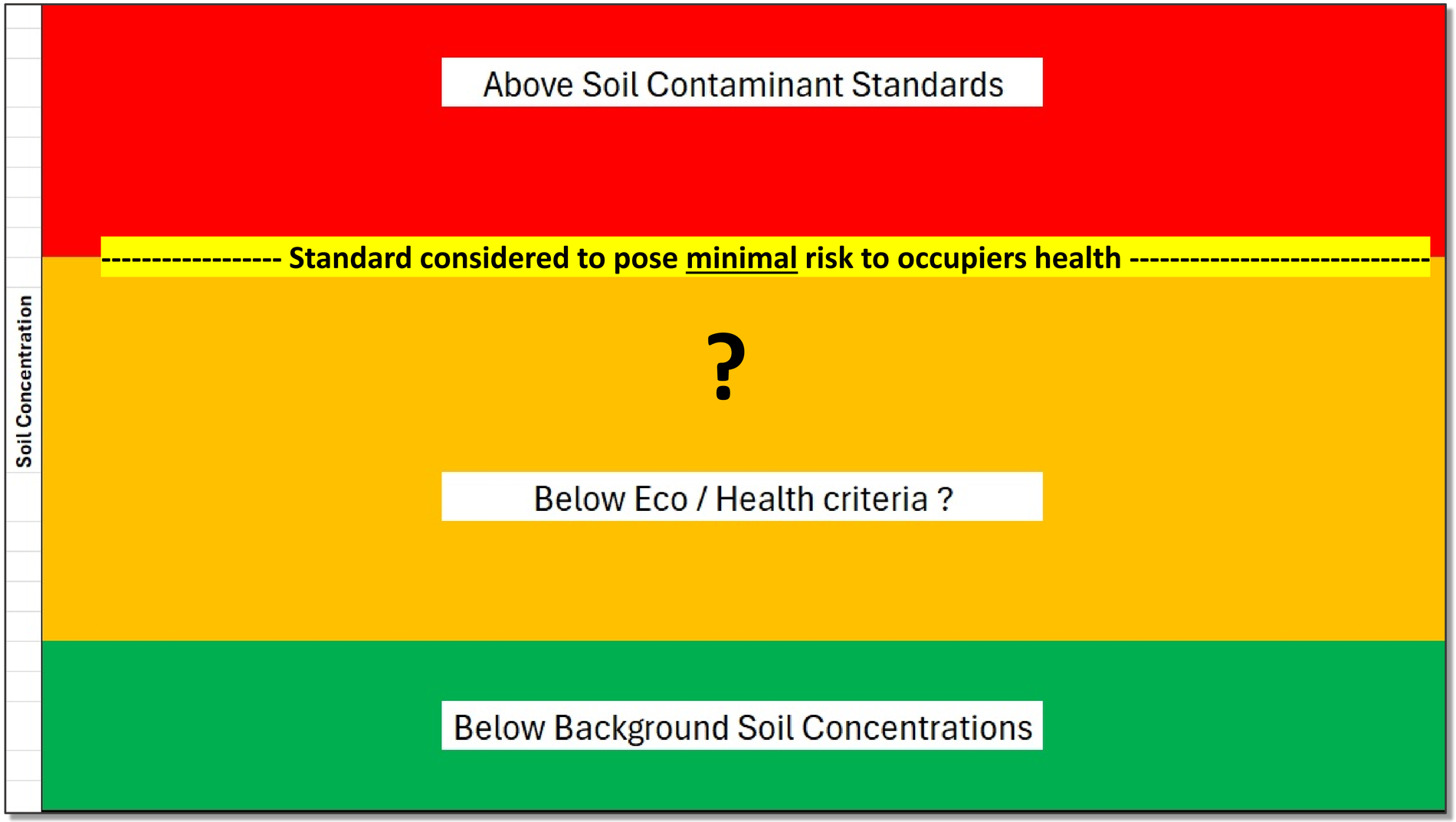
For subdivision or Change of Use

Provides flexibility for a SQEP to report to the decision maker and state ***'it is highly unlikely that there will be a risk to human health given the intended activity.'*** Reg 8 (4)
If the activity is subdividing or changing land use, the council can only exercise control over the adequacy of the detailed site investigation

For Soil disturbance or Disposal the **NES requires** a Controlled Activity consent for any land where the soil concentrations are at or above 'background'. Even where the soils are below any human health or ecological protection criteria..

Use of the concept and term '*background concentrations*' within the Regulations creates the impression that anything above this is 'contaminated'. Background concentrations often are naturally occurring ambient concentrations in the area local to the land.

Useful regulatory effort?



Why do we focus so much on the orange zone

Councils are naturally conservative

The NES is prescriptive – it doesn't allow for evidence-based decision making, **#Black or #White**

BUT - “if the effects are nearly zero the there should be a strong case for keeping soil on site.”

What options are there within the existing regime?

87BB - Activities meeting certain requirements are permitted activities

(1) An activity is a permitted activity if—

*(a) the activity **would be a permitted activity except for a marginal or temporary non-compliance** …. in this Act, regulations (**including any national environmental standard**), a plan, or a proposed plan; and*

*(c) any **adverse effects of the activity on a person are less than minor*;** and*

*(d) the **consent authority, in its discretion**, decides to notify the person proposing to undertake the activity that the activity is a permitted activity*

***Less than Minor Adverse Effects**
Adverse effects that are discernable day-to-day effects, but too small to adversely affect other persons.
[i.e. NOT NIL / Zero / Zilch]

Natural Conservatism

- Councils not necessarily known for risk taking
- should they be the ones taking risk? Do they retain some liability?

Muscle memory [analogy]

It's easy to make a decision that has been permitted before when comfortable with following a process successfully applied previously (Be prepared to do the hard yards first time round)

<u>Relationships with the council will be key</u>

Councils will be concerned about setting precedent – **make sure to set the bar 'HIGH'** with documented reports / verification.

May require full and detailed information on Site Investigation and Site Management Planning. (Dust / Sediment controls, protection of workers and the public .....)
Increased costs of investigation / Reporting offset by significant reduction in disposal costs

Difficult sites (those above SCS / Environmental Criteria)

Avenue Coking Works - Chesterfield

Case Study

Long term site management

Developers and owners concerns over

- Tied into long term costs
- Site permanently tagged as being contaminated
- Impacts on future land sales processes
- Potential need for future remediation

= RISK

The Avenue Coking Works was originally a colliery, open cast and underground mine, as well as iron ore and lime workings. At its peak Avenue employed 800 people and produced 1,400 tonnes of smokeless fuel a day.

Creation of wider based third party trust to take over the long term liability

Investment driven ‘Trust’ portfolio
Trust meets all current and future needs for site management

Funded by contributions from those divesting themselves of liabilities, grants, developer contributions, service charges & external sources of funding investments

Use of remediated land (suitable for use) as Public Open Space

The Land Trust - examples of landfill redevelopment

GREEN SPACES...
improve local economies

Well managed green spaces can contribute to the economy in many ways and this can enhance the desirability of an area as a place to live, work, play and invest.

Developers will see a direct financial benefit if they:

- Plan, design and deliver green spaces into new developments from the outset
- Secure the long term investment to maintain the green spaces from the outset

- **Sequencing of remediation can create attractive environment and then local interest into the future development**
- **Inward investment creates demand / added value**
- **Land development increases community feel good**

GREEN SPACES...
upfront investment is key

Our research has found that:

- Our green spaces and our long term management do help new developments succeed
- Some development professionals do recognise that a good quality green space benefits new developments
- The development sector overall does not recognise the direct return on investment
- The development sector does not have the mechanisms to quantify any direct benefit
- There is a lack of understanding in the development sector of the benefits of green spaces next to developments and how they can contribute to land value uplift

Port Sunlight River Park visitors are willing to a pay on average, **£9,478 more** for a house next to a park compared to the same house next to an industrial site.

GREEN SPACES...
increase local business revenue

Green spaces benefit a variety of local businesses, both onsite within the park as well as in the surrounding areas.

40,000 PARK VISITORS per year help local businesses

11 SMALL BUSINESSES USE THE PARK FOR BUSINESS PURPOSES

£48,000
TOTAL ANNUAL REVENUE GENERATED BY BUSINESSES WHICH OPERATE IN THE PARK

£40,000
THE AVERAGE ANNUAL BUDGET FOR AUTISM TOGETHER TO MAINTAIN THE PARK AND ENGAGE THE COMMUNITY

£38,000
HOW MUCH PEOPLE SPEND PER YEAR IN LOCAL BUSINESSES WHILST VISITING THE PARK

NEARLY 50% OF PARK USERS VISIT A LOCAL BUSINESS BEFORE OR AFTER VISITING THE PARK

Questions.

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