

NZRPNG 1 VALUATION OF CONTAMINATED LAND

The New Zealand Valuation & Property Standards Board issues the following guidance note to all members of the Property Institute of New Zealand and the New Zealand Institute of Valuers.

THE VALUATION OF CONTAMINATED LAND

Introduction

The growing world wide concern on environmental issues and the impact of hazardous substances on human life and real estate property has lead the New Zealand Institute of Valuers to prepare this guidance note for members.

Various studies have identified potential hazards and contaminated sites within New Zealand and make broad assessments of associated issues (refer bibliography). Valuers should be aware of the types of hazard that should warrant further investigation being initiated by either them or their client (acting on the valuer's advice).

In summary the valuer must

- recognise environmentally sensitive situations
- seek (with the client's consent) expert advice where warranted
- properly reflect in the market value of the property, the effect of any adverse environmental considerations.

Specific considerations

This note has been prepared by drawing on the work of The Royal Institution of Chartered Surveyors whose permission to reproduce this material from their paper VGN 11 is acknowledged.

For convenience, pollution and contamination are taken to be synonymous and the latter is used to describe those environmental factors which may have an adverse effect on human safety or significantly affect the environmental quality of land or buildings.

The importance of contamination to valuers in particular depends upon:

- (a) the state of knowledge at any time of the existence and effect of the particular form of contamination.

- (b) the current interpretation of the law.
- (c) the effect of possible changes in legislation.
- (d) current technology and expected changes in technology.
- (e) the previous use of the land/buildings.
- (f) the existing use of the land/buildings.
- (g) the proposed use of the land/buildings; and
- (h) the financial effect of the above.

Land

There are essentially three broad respects by which land may be affected by contaminants:

- (a) contaminants attached to and contained within the ground itself;
- (b) contaminated water, which may be static or migrating onto or off the site, in ground;
- (c) airborne contaminated gases emanating from substances in the ground.

Accordingly land itself may be physically unsuitable for particular forms of development due to contamination or other physical factors, for five main reasons.

- (i) Naturally occurring ground problems. These include: groundwater, solution of soluble rocks, land slipping, compressibility, movement, chemical effects (radon and methane). These all tend to be related to geology and since they occur naturally can be distinguished from the remainder of this list.
- (ii) Chemical contamination.
 - Waste tips
 - Industrial sites/buildings
 - Gas works
 - Chemical works
 - Animal product works
 - Shipyards
 - Defence and research Establishments
 - Sewage works

Contamination as a result of these uses may cause contamination to water courses.

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On site, there may be evidence such as: dead ground, ash, settling tanks, spoil heaps, artificial levels, made ground etc. **Direct or indirect local knowledge is important.**

More recently, modern technologies have introduced a wider range of contaminants, both site specific such as petro-chemical plants, power stations and nuclear facilities, and more dispersed in the form of consumer goods and services involving, such as, CFCs.

(iii) Mineral extraction and processing.

This description covers both surface and underground workings, much of which can be evidenced from records. Often geographically based its effect will vary according to the type of mineral operation and the extent to which unstable or contaminated materials have been tipped into mineral excavations.

(iv) Disposal of waste by land fill tipping.

(v) Agriculture and agricultural related industries.

These can cause both chemical and biological contamination to water and land.

Buildings

Each generation of building technology has experienced its particular defects and failings, typically the use of asbestos, high alumina cement and wood wool slabs. Some of these have structural implications, others have environmental implications.

Air conditioning systems give rise to various concerns: cost in use, quality of environment, bacteriological problems, chemical problems. In the latter case, the use and replacement of CFCs will be an increasing problem, with a high degree of obsolescence.

Some materials may be considered unsuitable by investors.

Looking further ahead, efficiency in energy use will place additional emphasis on insulation materials and buildings may, in the long term be analysed to establish their carbon generation and potential for recycling.

Current Use

The actual process of the construction of buildings and civil engineering work can cause contamination or diminished environmental quality, both on and off site and above and below the surface.

The use of a building may cause problems, including:

Air and noise contamination

The escape of hazardous materials Waste management and disposal

Occupiers, landlords and lenders all need to ensure that any contamination arising from the current use of the site is identified by inspection and/or enquiries of site management and that it is recorded.

Valuers should be aware of the impact of the Health and Safety in Employment Act 1992.

Valuation Basis

The general principle is that the valuer should reflect all relevant issues in his/her valuation.

Unless otherwise instructed the valuer should cause to be made such enquiries as in his/her professional judgement are necessary to establish any existence of, and the probable extent of contamination.

The enquiries may be undertaken by the valuer, an appropriate consultant appointed by the valuer in consultation with the client, or the client or may be met by the client providing information which the valuer considers adequate. The enquiries will be typically part of the valuation procedure of establishing current and past users of the subject land, including enquiries of the relevant authorities.

The type of enquiries would be a result of any initial on-site evidence of contamination or evidence in the location and the user/proposed user of the site.

Any apparent evidence of possible contamination arising from adjacent property should be noted and considered.

In all cases, the valuer is under a duty to advise the client if an issue has been identified which is outside his/her competence, (and for which the appointment of a consultant is recommended prior to the valuation being completed and/or any commitment being made.)

There is a tendency of lenders, sometimes at the insistence of insurers, to ask of valuers questions in standard forms which the valuer is not qualified or able to answer. The valuer should take care not to commit him/herself in such cases just because the instructions imply that the service to be provided so requires.

The effect on value

A valuer is unlikely to have the skills to undertake an environmental audit or interpret its significance, as it requires detailed technical knowledge and analysis.

The reduction in value attributable to contamination is generally measurable using the same methods and techniques that are used to measure loss in value or depreciation from other causes, for example residual and "before and after" valuation. Valuers should, however,

bear in mind that the market value of a property after remedial works, less the cost of such works may, for various reasons, be either greater or less than the mathematical sum.

Costs to be taken into account by the valuer include:

- (a) clean-up of on-site contamination;
- (b) effective contamination control and management measures;
- (c) re-design of production facilities;
- (d) penalties and civil liabilities for non-compliance;
- (e) indemnity insurance for the future;
- (f) the avoidance of migration of the contamination to adjacent sites;
- (g) the control of migration from other sites; and
- (h) the regular monitoring of the site.

The valuer should consider whether:

- (a) the source of the contamination or hazard can be successfully and economically eliminated; or
- (b) the contamination or hazard cannot be entirely eliminated but can be covered or contained so as to make the property fit for a particular use for a specified, perhaps limited, period; or
- (c) it is possible to mitigate the effect of the contamination or hazard in any way; or
- (d) the contamination or hazard has no effect on the market value of the property for existing use/ alternative use; or
- (e) a negative value may exist, particularly where an authority has a right to take action and charge the "owner".

In those cases, however, where it may be possible to eliminate the source or rectify the effects of the contamination or hazard, then the reported valuation may be assessed taking into account the market's view of the relevant estimated costs of such elimination or rectification together with other influences affecting market value, such as:

- (a) inability to effect a total 'cure';
- (b) stigma;
- (c) the risk of failure of treatment;
- (d) compensation for disturbance or reduced enjoyment of the property or adjoining sites;
- (e) risk of legislation/remedial standards changing;
- (f) a reduced range of alternative uses of the site;
- (g) uncertainty.

There is a need to avoid double counting in company accounts. Where a contingent liability for clean-up has been provided by the entity there may be no need for the

valuer to make a deduction in the valuation assessment. The valuer should consult with management of the entity where appropriate.

Contaminated land issues do not affect only market values of owner-occupied property. They may affect rental valuations and the valuation of freeholds in respect of leases which subsist, and the valuation of the leasehold interests themselves. Valuations in such cases need to reflect the respective responsibilities of the parties and the likely action of the other in cases of breach of those responsibilities, which will usually depend upon the precise wording in the leases. Particular aspects for consideration include repairing covenants and service charge provisions, which relate to the physical condition of both the site and the buildings; rent review clauses, which typically provide for the assumption that all tenants' covenants and statutory requirements have been complied with; and whether the landlord may be able and wish to refuse an application for assignment or oppose the granting of a new lease on grounds of breach of covenant.

Valuation for acquisitions and disposal (including letting) may attract similar considerations. Moreover the cost to a potential purchaser of procuring a report on possible contamination may limit interest and result in vendors deciding to procure surveys for the information of prospective purchasers, who would, however, need to consider the extent of the legal responsibility to them on the part of the provider of the report. Purchasers of the assets of a business as a going concern may require indemnities relating to past contaminative uses, and such requirements may impact upon the valuation.

The potential availability of grant aid, in particular programmes in respect of derelict land, and the roles of government agencies are factors to be considered in preparing valuations, and it may be appropriate to reflect the potential availability of a grant in the valuation. The valuer will carefully consider the appropriateness of so doing where the agency has not yet committed itself to an approved scheme.

All enquiries should be addressed to:

The Standards Committee
New Zealand Institute of Valuers
P O Box 27146
WELLINGTON

ENVIRONMENTAL ISSUES

A Selected Bibliography (compiled August 1994)

All the following articles or publications are held in the NZIV library, Wellington and are available on request

NOTE: Readers may update this readings list by reference to Valuers' NewsLine and the New Zealand Valuers' Journal, and the annual Index to the New Zealand Valuers' Journal

JOURNAL ARTICLES

The Appraisal Journal

- April 1991
 - Contaminated Properties - Stigma Revisited
Peter J Patchin MAI
 - An Evaluation of the Impact of a Well-Designed Landfill on Surrounding Property Values
Donald H Bleich PhD, M Chapman Findley III PhD, G Michael Phillips PhD
- July 1992.
 - Lenders' Perspectives on Environmental Issues
Patricia R Healy & John R Healy Jnr MAI
 - Owners Get Tax Refund Due to Asbestos
NY Appeals Court decision
- October 1992
 - The Impact of Hazardous and Toxic Material on Property Value: Revisited
Bill Mundy MAI PhD
- January 1993
 - Issues in the Valuation of Contaminated Property
James A Chalmers PhD & Scott A Roehr
 - Impact of Hazardous Waste Sites on Property Value and Land Use: Tax Assessors' Appraisal
Michael Greenburgh PhD and James Hughes PhD

The Canadian Appraiser

- Autumn 1990
 - Toxic Real Estate and the Role of the Professional
Mary C Hall
- Summer 1991
 - Legal Liability and Toxic Real Estate
Larry O Dybvig

The Valuer & Land Economist

- Volume 23
 - Impact of Environmental Planning on the Valuation Process, 23:518-21 *Thomas H O*
 - Re-use of Land to Improve the Environment, 23:330-6 - *Thomas H O*
 - Safeguarding the Environment, 23:39-43 - *Blanch j*
- Volume 24
 - Ecology Movement Effecting Land Values, Environmental Impact Studies and the Valuer, 24:364-5 - *Thomas H O*
- Volume 29
 - Valuations - The Impact on Environment Planning - *Robinson I D* January 1986 p5-8
- Volume 31
 - Valuers and the Environment (August 1991 p500-511)
The impact of hazardous waste on appraisal - *Kerry Herron FVLE*
The importance of environmental risk management - *Andrew Marr*
The Hidden risk of industrial investment - *Bevan Schwaiger*
Contaminated sites - *John T Mundy*

- Volume 31 - Why Valuers should consider Environmental Contamination and Compliance Issues
- *Peter Menylees* . (November 1991 p567-571)
- Volume 32 - Environmental Liability: Risks for Valuers - *I Hunt* (February 1993 p359)
- Volume 32 - Environmental Liability: Additional Risks for Valuers - *R R Nathans* (February 1993 p363)
- Contaminated Sites: Remediation, Development and Marketing
- *Annand P G* (November 1993 p598)
- Contaminated Sites: Assessment, Remediation and Value-Added Strategies
- *McNamara M* (November 1993 p596)
- Contaminated Sites: Lenders' Concerns and Requirements to Reduce Environmental Risks
- *Schwaiger B* (November 1993 p588)
- Contaminated Sites: Standard for Valuation of Contaminated Land in Australia
- *Spencer J A* (November 1993 p585)
- Volume 33 No 2 - (AIVLE) Contaminated Land Practice Standard (May 1994)

New Zealand Valuers' Journal

- June 1992 - Environmental Audits - *J D Lynch*
- March 1993 - Effect of Environmental Factors and Pollution. TIAVSC Information Paper # 11
- March 1994 - Environmental liability and the Banker-Valuer Relationship - *Xan Harding*

Monographs held by the NZW

- Real Estate Issues (Winter 1991) - Lenders' Perspectives on Environmental Issues
- Environmental Counselling Cases
- Landfills Aren't All Bad: Considerations for Real State Development
- How a Garbage Dump Became a Post Office
- The Effects on Residential Real Estate Prices from Proximity to Properties Contaminated with Radioactive Materials
- Current Legal Issues Raised by environmental Hazards Affecting Real Estate
- A Case for an Environmental Real Estate Market
- The Valuation of Contaminated Properties
- Rationalizing Environmental Cleanup
- IAAO Standard. (August 1992) - Standard on the Valuation of Property Affected by Environmental Contamination
- Appraisal Institute of Canada - Contaminated Real Estate Implications for real estate appraisers
- (NZ) Ministry for the Environment - Potentially Contaminated Sites in New Zealand
A Broad Scale Assessment (November 1992)
- Appraisal Institute - Measuring the Effects of Hazardous Materials Contamination on Real Estate Values: Techniques and Applications
- Royal Forest & Bird Protection Society - Handbook of Environmental Law
- Australian & NZ Environment & Conservation Council - Australian & NZ Guidelines for the Assessment and Management of Contaminated Sites (January 1992)

SEMINAR PAPERS HELD IN THE NEW ZEALAND INSTITUTE OF VALUERS LIBRARY

Distance Teaching Seminar 1993

Seminar No 2 "Environmental issues", papers covering

- Asbestos
- Dairy effluent disposal and noxious dumps
- Environmental issues impacting on the valuation process
 - What a valuer needs to know from a legal perspective
- Contaminated sites - updates for valuers
- Environmental Risk, valuers, and valuations - a banking perspective

1994 Auckland Branch AGM

"The Environment"

Contaminated Land - associated issues for valuers

Valuers in the environment

Some effects of the RMA on property

Organic

Waste Management

Valuing the Environment

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