

System in accordance with AS3902 for all aspects of the services and to produce details of a Quality Plan within 14 days of the contract commencement date. This approach was adopted to reduce the involvement of the Superintendent in managing the contract. An active contract file was set up for collating all records, invoices, payment advice and minutes of meetings with the contractors.

The contracts have been in operation for almost 12 months now and the first contract review is currently underway.

Conclusion

Contracting out of activities within Melbourne Parks and Waterways has successfully reduced maintenance costs by over \$1 million per annum and achieved a more efficient delivery of services. A few hiccups did occur in some parks, but they have since been resolved and reinforce the need for accurate and unambiguous documentation at the pre-tender stage.

The use of the two-envelope system ensured a smooth process and expedient implementation of a large number of contracts over a broad area. It is essential to carefully plan the project and to keep re-viewing progress and quality to enable continuous improvement with a view to a long term partnership between contractor and client.

References

- New Zealand Recreation Association (1992). 'Competitive Tendering in New Zealand. A Step-By-Step Workbook'. (Wellington, New Zealand).
- North Shore City Council—Parks and Reserves (1993). 'Basis for Tender Evaluation', (flysheet accompanying tender documents). (Auckland, New Zealand).
- Office of State Owned Enterprises—Government of Victoria (1993). 'Contracting Out Guidelines'. (Melbourne, Australia).

Legal issues, liability and litigation

Michael Psaltis, Swinburne Institute of Technology, John Street, Hawthorn, Victoria 3122, Australia.

Not available for publication. For further information contact author direct.

Licensing and herbicide usage

John Brereton, VCAH Burnley, Richmond, Victoria 3121, Australia.

Introduction

Safe practices in handling and use of agricultural chemicals, which includes herbicides, must reduce the potential for accidents or any unwanted affects emanating from their usage. All persons who use agricultural chemicals in the course of contract work need to be aware of their responsibilities, not only with respect to common law, which imposes the duty of care, but also in relation to specific acts, regulations and codes of practice where applicable.

This paper is one attempt to inform contractors, potential contractors and those involved in the administration of contracts dealing with weed control of their responsibilities with respect to licensing for herbicide applicators.

The use of agricultural chemicals is an issue requiring knowledge and the recognition of responsibilities by managers of urban space areas. The issue needs to be effectively dealt with in contract specifications as the general public utilizing these areas, the workforce and managers themselves become more aware of the potential problems associated with chemical usage. Negligence in this area could lead to litigation and liability incurred can become an expensive and time consuming process. Managers or persons involved in contract specification and the adherence to specifications, need to spearhead the development and implementation of guidelines which will deal with this important area in a relevant and practical manner. Documentation with respect to contracts must take account of legislative changes and new regulations as they emerge and should be underpinned by in-house policies and attitudes that set out to limit exposure to chemicals to the lowest practicable level or prevent exposure entirely for employees and the public at large. In addition, protection of the environment at large must be embraced as a matter of policy and reflected in contract documentation.

No persons should be associated with the supervision, handling or application of agricultural chemicals unless they meet

the specified training requirements addressed by the Pest Control Operators Regulations 1992. In particular, under current Victorian legislation controlling the use of agricultural chemicals, a commercial operator must hold a Pesticide Operators License.

On the matter of contract documentation, contractors should be restricted to using only the approved agricultural chemicals which have been cleared by management of the respective organization and stipulated quite clearly within the contract documentation. It is now an offence in Victoria to use a prohibited substance and will become an offence to use a product 'off label'.

The survival of herbicides as valuable tools and whether or not additional benefits can be derived from chemical vegetation control methods in urban areas will largely depend on public perceptions about herbicides and their impact on the environment. Positive attitudes tend to be associated with a track record of safe and effective usage. As with many other technologies today, use of herbicides poses risks which must be assessed in the context of their benefits. Most of us accept that driving a motor vehicle or operating a fork lift truck requires a license, there is no reason why specific conditions should not be imposed on professional chemical applicators.

Changes to legislation

A few examples of recent changes to legislation follow.

Operators should be aware that legislation has been invoked which now increases the level of control on the use of agricultural chemicals, including herbicide usage, under the Agricultural and Veterinary Chemicals Act 1992.

These increased levels of regulation not only affect applicators, but also manufacturers and distributors. Penalty provisions for failure to comply with regulations range from \$1000–50 000 for the misuse of agricultural chemicals under this new legislation, e.g. spray drift occurring outside the target area.

Notwithstanding this Act there is also in addition the State Health Act regulations dealing with licensing and separately the State Environment Protection Policy (SEPP). Under the auspices of the Environmental Protection Agency, maximum penalties for causing an environmental hazard is \$20 000 with a daily penalty of \$8000 for a continuing offence. Penalties may increase if the magistrate is of the view that the offence was committed intentionally.

There is currently under discussion provision to restrict access further to the S7 Dangerous Poisons, whereby persons will be required to prove that they have undergone appropriate training and have been registered in order to gain access to these poisons.

Pertinent legislation includes the following:

- Agricultural and Veterinary Chemicals Act 1992 replacing Agricultural Chemicals Act 1958
- Health Act (1958) Part 5, Division 2A Pest Control Operators Regulations 1992
- Occupational Health and Safety Act 1985:
 - Part 3 – Section 21 Duties of Employers
 - Section 25 Duties of Employees
 - Part 4 – Section 37 Health and Safety Committees
- Environmental Protection Act 1970
- Drugs, Poisons and Controlled Substances Act 1962—deals with labelling and scheduling of poisons
- Dangerous Goods Act 1985 and the Dangerous Goods (Storage and Handling) Regulations 1989 (OIC) and Dangerous Goods (Prescribed List) Regulations 1986

Agricultural and Veterinary Chemicals Act 1992

The Act in Victoria now controls the registration and use of materials dated 1 July 1992, although aspects of the regulations which determine the operation of the Act are still under discussion.

Major changes proposed include the increased level of control over the use of agricultural chemicals, particularly making it an offence to use chemicals in a manner which is contrary to that stated on the label. This also means that the operator must not exceed the rates on the label or apply more frequently than that recommended on the label. The new Act also imposes new controls on agricultural spraying.

Licensing by the Department of Health and Community Services concerning herbicide application: Health (Pest Control Operators) Regulations 1992

There is now in existence an update of the previous Pest Control Operators Regulations, as of 1 July 1992, replacing the old

regulations. This applies to pest control operators only who may be engaged in herbicide spraying. Significant changes include weeds now being described as pests, and therefore operators who only control weeds are now required to be licensed. These new regulations prescribe the qualifications required for pest control operators, including weed control. Businesses must be licensed, operators must be licensed and record keeping requirements adhered to.

Licensing is now required for commercial operators for urban, industrial and municipal areas under the State Health Act. Agricultural areas are dealt with separately and are covered by the Agricultural and Veterinary Chemicals Act 1992.

Licenses and pest control operators – endorsements

Qualified applicants may seek the following types of endorsement on a pest control license:

- control of arthropods and rodents in commercial and domestic premises and public lands
- control of weeds and pest plants in commercial and domestic premises and public lands
- control of vermin and pest animals
- fumigation of structural and/or soil or grain and/or produce

Categories of license – pest control

Technical manager – Grade 3 license. The license holder is able to register a pest control business or to act as a technical manager in a pest control business, provided that person holds the relevant endorsement. The license may be granted to a person who has previously held a relevant 'Technician's' license for more than 12 months and who has obtained more than two years practical experience or other equivalent qualification and who passes the Technical Manager's License Examination controlled by the Department of Health and Community Services.

Technician – Grade 2 license. The license holder may apply pesticides while employed by a registered pest control business. The 'Technician's' license can be issued to a person who has completed the requirements under a trainee license, or other approved training and passed the relevant Pest Control License Test administered by the Department of Health and Community Services. The 'Technician's' license can carry more than one endorsement.

The approved training consists of a licensing course open to persons engaged in the pest control industry as operators. On successful completion of an external examination the issue of a Class 2 license may occur. The course itself is normally conducted over 30 weeks, with a total du-

ration of 90 hours. Weed identification and control is an elective unit within this course.

Trainee – Grade 1 license. The license holder may apply pesticides under the supervision of a licensed technician while in the process of gaining knowledge and experience in the area for which the trainee license is endorsed.

Trainee licenses are issued to persons who are:

- i. employed in a registered pest control business,
- ii. passed a preliminary test administered by the Department of Health and Community Services and
- iii. are 18 years of age minimum.

Approved training for this license includes the Farm Chemical Users Course, a 30 hour program or 16 hour program, depending on the previous experience of persons registering for the program.

Vehicles

Licensed pesticide users are also required to operate vehicles and equipment of a specified standard.

Exemptions

Under the Victorian Health Act, there are exemptions in Section 5 with respect to herbicides. The Regulations do not apply to anyone who applies a herbicide with hand pumped equipment that has a tank capacity of 10 litres or less for specific herbicides, including glyphosate, propyzamide, ethufumesate, karbutilate, siduron and copper salts.

Training in herbicide use

Weed management strategies frequently include herbicides as valuable tools. However, these need to be used safely and judiciously to reduce hazards and maximize their effect.

Training in the safe use and subsequent licensing for the use of herbicides is now deemed essential for weed control operators. The establishment of uniformity across Australia in terms of training and licensing arrangements is another issue of high priority. Needless to say, very significant progress has been made in the area of herbicide application, particularly in Victoria over recent years, which is comparable with international standards.

References

- Hitchmough, J.D. (1994). Urban Landscape Management. (Inkata Press, Melbourne).
- Department of Primary Industry (1980). A Manual of Safe Practice in the Handling and Use of Pesticides. (Pesticides Section, DPI, Canberra).
- Department of Health and Community Services. Guidelines: Pest Control Licensing.