

2020

UNLICENSED GOLF COURSE AUDIT

INTEGRATED PEST MANAGEMENT ACT



Ministry of
Environment and
Climate Change Strategy

EXECUTIVE SUMMARY

In 2020, the Compliance and Environmental Enforcement Team of the Ministry of Environment and Climate Change Strategy (ENV) conducted an audit of unlicensed golf courses to address findings that approximately 60% of the 297 golf courses in British Columbia (B.C.) did not hold a licence under the *Integrated Management Act* (IPMA or Act). Not all golf courses in B.C. require a licence, as some may chose to hire a service licence, only use excluded pesticides, or not use pesticides at all. The golf sector in B.C. falls under the landscape category which allows the use pesticides to manage pests of landscapes, such as golf greens and fairways.

The main objective of this audit was to verify compliance with the licensing requirements under the IPMA and Regulation (IPMR). Each inspection assessed non-excluded pesticide use and pesticide storage. This audit follows amendments made to the IPMR in 2016 requiring golf courses using non-excluded pesticides to be licensed and certified.

A total of 29 inspections were conducted across the province, representing approximately 16% of the total number of unlicensed golf courses (179) in B.C. Compliance determinations were as follows:

- The overall rate of compliance was 24%. The inspections conducted led to 7 notices of compliance, 15 advisories of non-compliance, and 7 warnings of non-compliance.
- 86% of the unlicensed golf courses inspected have never previously held a pesticide user licence and 14% previously held a pesticide user licence but failed to renew their licence prior to pesticide use.
- 24% of the unlicensed golf courses were compliant as they did not require a pesticide user licence as no pesticides were used.
- Of the 29 golf courses inspected 20 golf courses also had a pesticide storage inspection, 75% were non-compliant.

Non-compliant golf courses received either an advisory, which is the lowest level of enforcement response, or a warning, which is a more serious non-compliance. The majority of these non-compliances could be corrected by either applying for a pesticide user license or complying with the pesticide storage requirements. When considering the level of enforcement response to a non-compliance, ENV staff consider several factors including actual or potential environmental impacts and desire/willingness to comply.

The results of this audit indicate that the golf sector requires more compliance verification, outreach, and promotion of the licensing requirements under the IPMA and IPMR. The majority of non-compliant golf courses (76%) did not have a licence to use pesticides and received either an advisory or warning letter of non-compliance. An audit of the golf sector was also conducted in 2017 where 17 unlicensed golf courses were inspected and 59% were using pesticides without a licence to do so (2017 IPMA Golf

Course Audit, Ministry). Prior to both golf sector audits, the ENV found some success in improving compliance by providing letters to industry of the licensing requirements under the IPMA and IPMR.

The ENV will continue to conduct compliance inspections of golf courses, provide regulatory updates, and work with various golf course industry associations in B.C. to ensure licensing requirements are met and to improve compliance in the future. Regulatory oversight of this sector is important to ensure that the environment is protected and a level playing field amongst golf courses is maintained.

CITATION AND FURTHER INFORMATION

This report should be cited as:

2020 Unlicensed Golf Course Sector: Compliance Audit Report, Integrated Pest Management Act, Regional Operations Branch, British Columbia Ministry of Environment and Climate Change Strategy.

Further information regarding this report may be obtained by contacting:

The Integrated Pest Management Program:

Integrated Pest Management Program
P.O. Box 9341
Stn Prov Govt
Victoria, BC
V8W 9M1

Email: BC.IPM@gov.bc.ca

TABLE OF CONTENTS

Executive Summary.....	2
Citation and Further Information	3
Introduction	5
Background	5
Definition of terms used in this report	6
Excluded Pesticides	6
Integrated Pest Management	6
Pesticides and Active Ingredients	7
Authorization Status: Unlicensed Vs. Licensed	7
Methods.....	7
Inspections	7
Results.....	10
Compliance Outcomes	10
Compliance Rate and Regulatory Responses.....	10
Compliance Results for Specific Requirements	11
Discussion	13
Compliance Results	13
Recommendations and Next Steps.....	14
Appendices.....	15

INTRODUCTION

BACKGROUND

ENV regularly conducts audits to verify compliance within a specific sector that uses pesticides under the IPMA and IPMR. Audits are typically conducted through a combination of onsite inspections and office inspections that includes a review of submitted records and associated pesticide use data.

In 2016, the IPMR was amended to require licensing and certification for most landscape pesticide uses on both public land and private land. This change to the IPMR meant that most golf courses in B.C. were required to hold a valid pesticide user licence to apply non-excluded pesticides, where previously they were exempt from that requirement. A list of excluded pesticides can be found under schedule 2 of the IPMR as well as schedule 5 for certain uses. In 2017, an audit of licensed golf courses was conducted to ensure that the industry was following environmental and human health requirements outlined in the IPMA and IPMR, and to understand how turf pests are managed to reduce the use of pesticides. The results from the 2017 audit showed that licensed golf courses focused on maintaining healthy turf through fertilization rates, aerating, managing irrigation schedules, top-dressing, and mowing heights, and that most of the pesticide uses (95%) were fungicides to control diseases. The full audit report is located at: <https://www2.gov.bc.ca/gov/content/environment/pesticides-pest-management/publications-guides>.

The IPMA establishes conditions for the sale and use of pesticides, and regulatory provisions and standards for licences and certification. The terms and conditions of a Pesticide User Licence require that pesticides are being applied by a certified applicator, that records of pesticide applications are kept, and that pesticides are only applied in up to 8 km/hr winds, among other important requirements. In addition, the IPMR ensures that the six elements of integrated pest management (IPM) are followed for each pesticide application. The concept of IPM is embedded in the IPMR and involves strategies for the prevention of pest populations, identification of pests, a process for monitoring pest populations, establishing injury thresholds for when pest population require the use of pesticides, and evaluating the effectiveness of pest management treatments.

When the IPMR was amended in 2016, ministry staff conducted outreach and compliance promotion to ensure that all golf courses were aware of the new requirements. However, in early 2020 ministry staff compared the number of current Pesticide User Licences issued to golf courses (118 licences) to the total number of golf courses identified in B.C. (297 courses). The finding that only 40% of all golf courses in B.C. were licensed indicated to ministry staff that a compliance audit of unlicensed golf courses would be beneficial to determine if there were golf courses using non-excluded pesticides without the required authorizations.

This report covers the inspection results of unlicensed golf courses for compliance verification under the Act from July to September of 2020.

The specific objectives of the audit were:

- To verify compliance with the requirements of licensing, pesticide storage, and any other applicable sections of the legislation.
- To ensure the protection of the environment.
- To ensure a level playing field for compliance with the regulated requirements in this industry.
- To share the ministry's work with the public.

Compliance verification by ministry inspectors is guided by ministry policy and procedures, and ENV uses a variety of compliance and enforcement tools to ensure compliance with regulatory requirements.

When responding to non-compliance, the ENV considers:

- a) the severity of actual or potential impact to the environment and human health,
- b) the factual circumstances of the alleged contravention, and
- c) the compliance history of the inspected party

For more information on how ministry inspectors assess and respond to non-compliances, please review the [Compliance and Enforcement Policy and Procedures](#).

DEFINITION OF TERMS USED IN THIS REPORT

EXCLUDED PESTICIDES

The IPMR includes a list of pesticides that are excluded from certain licensing and certification requirements. These pesticides are listed in Schedule 2 of the IPMR and include examples of low-risk pesticides such as insecticidal soaps and domestic herbicide formulations such as acetic acid. Schedule 5 also includes excluded pesticides if the land-owner is using them on their own private land. Golf courses on public land would not qualify for the schedule 5 excluded list of pesticides. A golf course using only excluded pesticides would not be required to hold a Pesticide User Licence.

INTEGRATED PEST MANAGEMENT

Integrated Pest Management (IPM) is a decision-making process for managing pests in an effective, economical, and environmentally sound way. Techniques used in IPM programs range from preventative and cultural measures to the use of biological, physical, behavioral, and chemical controls. One or several measures may be coordinated into a management program for a target pest, or for the

entire pest complex of insects, mites, diseases, and weeds. Under the IPMR, licensees may only use a pesticide in accordance with the six principles of IPM.

PESTICIDES AND ACTIVE INGREDIENTS

The following pesticide categories are commonly found at golf courses:

1. **Herbicides** – used to control unwanted plants (weeds)
2. **Fungicides** – used to control fungi
3. **Insecticides** – used to control insects

Pesticide formulations are composed of two parts: active ingredient(s) and formulants. The active ingredients in a pesticide are what control the target pest, and a pesticide may contain one or more active ingredients. Formulants may aid in the stabilization, mixing, or application of the pesticide.

AUTHORIZATION STATUS: UNLICENSED VS. LICENSED

A licensed golf course is one that held a valid pesticide use licence at the time of inspection. An unlicensed golf course is one that did not hold a valid pesticide use licence at the time of inspection. A distinction is made between the authorization status because some requirements apply to golf courses regardless of their authorization status (e.g., pesticide storage requirements), whereas other requirements apply only to a licence holder (e.g., records and reporting requirements).

METHODS

INSPECTIONS

On June 3, 2020, prior to commencing any inspections under this audit, ministry staff sent a letter to each unlicensed golf course in the province. The purpose of the letter was to promote the existing licensing requirements and provide awareness of the upcoming audit. In addition, the letter outlined the safety protocols ENV staff were required to follow under the COVID-19 restrictions. All inspections were pre-arranged to meet COVID-19 safety requirements set by the ENV and incorporated any additional requirements set out by the individual golf courses.

Prior to inspections, inspectors completed the mandatory pandemic awareness training and completed a pre-inspection checklist. Specifically, the inspectors:

- contacted the golf courses to schedule the inspection in advance and asked if there were any confirmed COVID-19 cases or exposures at the site,
- followed any additional screening criteria that were in place at the golf course upon arrival,

- wore mask and gloves, and maintained physical distancing aligned with current guidance (2 m between people) during the inspection, and
- maintained high levels of personal hygiene at all times

A total of 29 inspections were conducted for this audit; 8 inspections occurred in the Lower Mainland, 5 inspections on Vancouver Island, 12 inspections in the Thompson-Nicola and Okanagan, 2 in the Kootenays, 1 in the Omineca, and 1 in the Peace (figure 1a and 1b). See Appendix A for a list of all inspected parties.



Figure 1a. Geographic distribution of B.C. regions

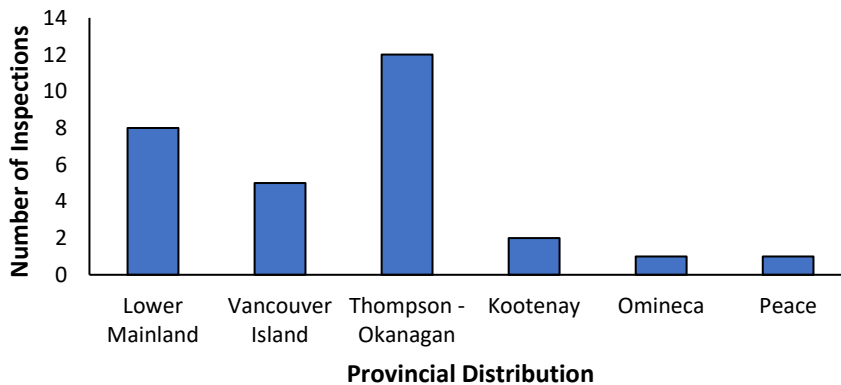


Figure 1b. Distribution of inspections across regions of B.C.

The inspections primarily focused on the following regulatory requirements:

- Pesticide User Licence requirements (*IPMA* Section 4 and *IPMR* Section 44)
- Pesticide storage requirements (*IPMR* Sections 33, 65, & 66)
 - Pesticides stored in compliance with container and labelling requirements.
 - Storage facilities located away from food intended for human or animal consumption.
 - Storage facilities locked, vented, and bearing appropriate warning signage.

Upon completion of the compliance inspections, licensees were issued an inspection report using the ministry’s Natural Resource Inspection System (NRIS), a provincially standardized database to house and capture inspection records. In each inspection report, the inspector outlined the requirements assessed, the details of the findings, and an assessment of whether the licensee was in or out of compliance with the requirement. If a non-compliance was noted, the report outlined actions to be taken to correct the non-compliance. All inspection reports are available in the [Natural Resources Compliance and Enforcement Database](#).

Compliance findings for each section were one of four outcomes:

In	ENV determined that the authorization holder is in compliance with the regulatory requirement at the time of the inspection.
Out	ENV determined that the authorization holder is out of compliance with the regulatory requirement at the time of the inspection.
Not determined	There was not enough information for ENV to determine whether the authorization holder is in compliance with the regulatory requirement at the time of the inspection.
Not applicable	Compliance with the regulatory requirement did not apply to the authorization holder at the time of the inspection.

ENV determined the appropriate administrative response based on the compliance verification findings of the inspection using the non-compliance decision matrix contained in ENV’s Compliance and Enforcement Policy and Procedure. A detailed description of some common administrative responses is included below:

Notice	A notice of compliance is a written confirmation that ENV determined that the authorization holder is in compliance with all of the regulatory requirements evaluated at the time of the inspection.
Advisory	An advisory notifies the non-compliant party in writing that they are not in compliance with a specific regulatory requirement and often recommends a course of action that is expected to achieve compliance. An advisory is often the first enforcement response taken in cases of minor to moderate non-compliance when there is a high likelihood of achieving compliance.
Warning	Similar to an advisory, a warning notifies the non-compliant party in writing that they are not in compliance with a specific regulatory requirement; however, the warning differs from an advisory in that it warns of the possibility of an escalating response should non-compliance continue. Warnings are generally used when it is determined that an exchange of information alone would not be sufficient in achieving compliance.

The response of a notice of compliance is only issued if none of the assessed sections are found to be out of compliance. If a single non-compliance was found during an inspection, the minimum compliance response is an advisory, regardless of how many sections complied or how minor the non-compliance was.

Both advisories and warnings serve as a formal record of the alleged non-compliance and form an important element of the compliance history of the party in question. Other responses such as orders, administrative monetary penalties, etc., within ENV's enforcement toolkit can be found in ENV's Compliance and Enforcement Policy and Procedure.

RESULTS

COMPLIANCE OUTCOMES

COMPLIANCE RATE AND REGULATORY RESPONSES

Of the 29 unlicensed golf courses inspected, 7 were found to be fully in compliance and 22 golf courses were out of compliance with at least one aspect of the IPMR (figure 2a). Golf courses found to be compliant with the IPMR were issued a notice of compliance, whereas non-compliant facilities were issued either an Advisory or Warning, in accordance with the Ministry's Compliance & Enforcement Decision Matrix. Overall, the audit resulted in 7 notices (24%), 15 advisories (52%), and 7 warnings (24%) (figure 2b). The non-compliant parties in receipt of warning letters included golf courses applying non-excluded pesticides without holding a valid authorization, and/or for improper pesticide storage, which included missing labels on containers, inadequate ventilation, and/or unlocked storage facilities. It should also be noted that approximately 86% of the unlicensed golf courses inspected have never previously held a pesticide user licence whereas 14% have previously held a pesticide user licence, but failed to renew their licence prior to pesticide use.

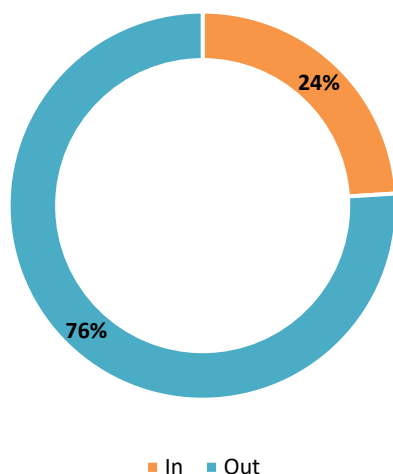


Figure 2a. Compliance summary of inspected golf courses

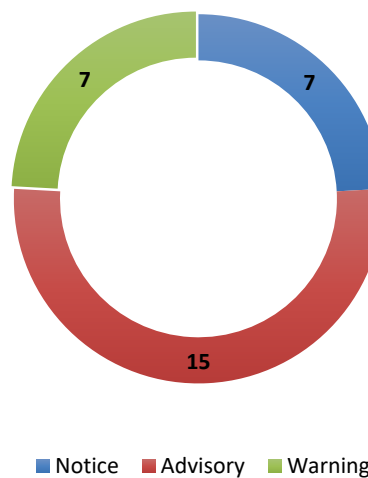


Figure 2b. Compliance response of inspected golf courses

COMPLIANCE RESULTS FOR SPECIFIC REQUIREMENTS

The inspection results found that of the 29 unlicensed golf courses inspected, 22 had applied pesticides without a valid authorization to do so and were therefore out of compliance with the licensing requirements under the IPMA. In contrast, there were 7 unlicensed golf courses that at the time of inspection had not applied pesticides in 2020, as those golf courses did not require an authorization they were in compliance.

Pesticide storage requirements for pesticide users are mainly assessed for compliance under sections 65 and 66 or section 33(1) of the IPMR. Of the 29 unlicensed golf courses inspected, 31% were not storing commercial pesticides and were not assessed for compliance. Of the unlicensed golf courses who were storing non-excluded commercial pesticides, 71% were storing pesticides in their original packaging and had an appropriate pesticide label as required under section 65 of the IPMR (figure 3). Non-compliances were issued to unlicensed golf courses under section 65 of the IPMR for either having obscured, missing, or partial labels on containers. Under section 66 of the IPMR, 35% of unlicensed golf courses had appropriate ventilation, proper signage, no human or animal food was stored with the pesticides, and the storage facilities were locked. Non-compliances were issued under section 66 of the IPMR where storage facilities were unlocked, drink containers were found in the storage area, improper ventilation, or no warning signs were displayed on the entrances to the storage area. Three unlicensed golf courses were inspected under section 33(1) of the IPMR, 33% were in compliance and 66% were out of compliance for either missing a pesticide label or not locking their storage area. Overall, 25% of

unlicensed golf courses inspected, which were assessed for compliance on pesticide storage requirements, were in compliance with both sections 65 and 66 or 33(1) under the IPMR.

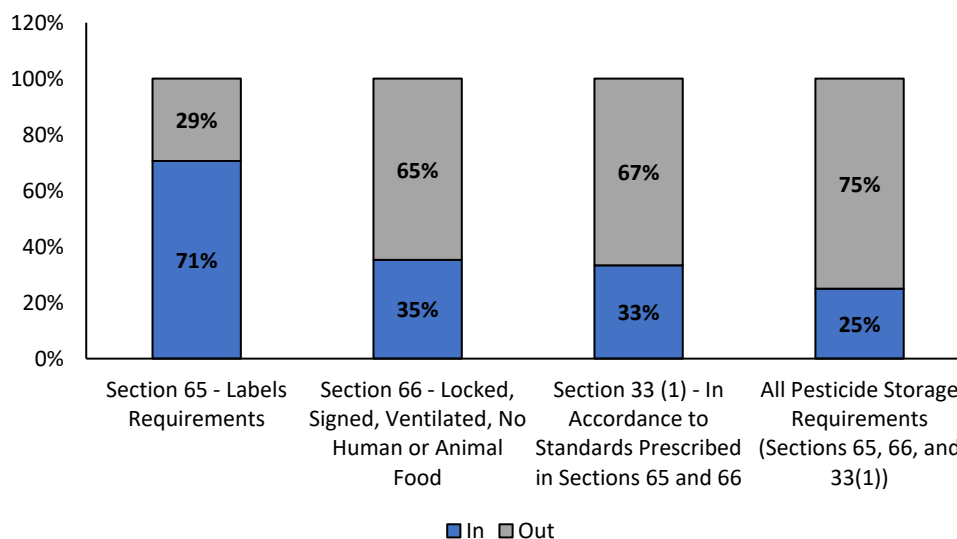


Figure 3. Compliance results of inspected golf courses for pesticide storage requirements under sections 65, 66, and 33(1) of the IPMR

An example of a pesticide storage facility compliant with sections 65 and 66 or 33(1) can be found in figure 4a. and 4b.



Figure 4a. and 4b. Example of a pesticide storage facility that was adequately locked, signed, and vented to the outside (left image). Example of a pesticide stored in manufacturer packaging with original label (right image).

Golf courses and other licensees generally apply to renew their licence between January and April each year. ENV records indicated that in 2020, 57 golf courses applied to renew their licence in April, 16 golf

courses applied in July, and 13 golf courses applied in August (figure 5). These increases in July and August came after the ENV sent out a letter to unlicensed golf courses on June 3, 2020 informing them of the ENV’s inspection plans for the year. In September and October there was also an increase in licence applications as further inspections were conducted in those months.

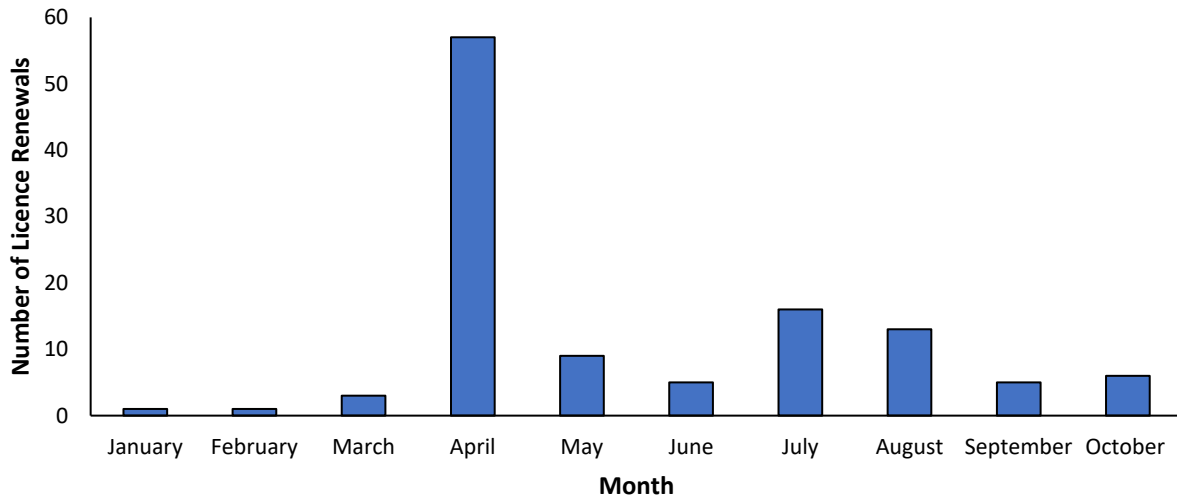


Figure 5. Golf Course Licence Renewal Applications received by the Ministry throughout 2020.

DISCUSSION

COMPLIANCE RESULTS

The results of this audit found that the overall compliance rate was relatively low, with only 24% of inspected unlicensed golf courses being in full compliance at the time of inspection. Most of these non-compliances involved the use of pesticides without a licence which was expected as an audit of unlicensed golf courses is more likely to yield more non-compliances than an audit of any or all golf courses in the province. These results occurred despite unlicensed golf courses receiving a reminder letter of the provincial requirements for licensing and certification under the IPMA and the IPMR.

Most of the non-compliances found were minor or administrative in nature, with low potential risk to human health or the environment. This is reflected in 52% of the non-compliant parties receiving an advisory, the lowest level of enforcement response. Approximately 24% of inspections resulted in warning letters for non-compliances in actively applying pesticides without the proper licensing. Following inspection, many non-compliant parties took measures to ensure compliance by applying for a licence.

As pesticide storage requirements under the IPMR apply to any person storing pesticides and do not depend on licensing status, all golf courses in the audit that had a pesticide storage area were inspected for these requirements. The compliance rate for pesticide storage areas was relatively low at 25% and required improvement. The 75% that were out of compliance were mainly in relation to facilities being unlocked, had unclear labels on pesticide containers, stored a drinking container in their shed, or lacked proper warning signage on their storage facility.

All compliant unlicensed golf courses (24%) did not require a licence at the time of inspection because pesticides had not been used on the golf course and no pesticides were stored on site. Some golf courses chose to hire another licensee to complete pesticide applications for them when needed which excludes the golf course from requiring a pesticide user licence. Each unlicensed golf course that did not meet the licensing requirements under the IPMA and the IPMR were instructed by inspectors on the next steps to be taken to get them into compliance and were provided with instructions on how to get a licence through relevant links to the [Pesticides and Pest Management Webpage](#), templates, and other applicable documents.

Finally, the results of the audit were presented to the Western Canadian Turfgrass Association virtual Annual General Meeting in early 2021. Presenting the audit findings, along with additional information on pesticide best practices and regulatory compliance, assists with the promotion of IPMR requirements to a broad audience of the golf industry, and helps to demonstrate that the ministry is conducting inspections on unlicensed parties to ensure a level playing field across the province.

RECOMMENDATIONS AND NEXT STEPS

From the results of this audit, ENV is recommending the following:

- That ministry inspectors will continue to conduct compliance verification and enforcement on unlicensed golf courses to ensure that they meet all regulatory requirements, given the relatively low levels of compliance found in the audit.
- That ENV will continue to work with the Western Canada Turf Grass Association (WCTGA) and the Allied Golf Association of BC to educate and provide regular regulatory updates to golf courses on the licensing and certification requirements under the IPMA and IPMR and promote good pest management practices following IPM.

APPENDICES

Appendix A: List of unlicensed golf courses inspected, and determinations made under the IPMA and IPMR

Golf Course Name	Region	Compliance Determination
Cherryville RV Golf and Roadhouse Café	Thompson/Okanagan	Warning
St. Andrews By the Lake	Thompson/Okanagan	Notice
Mission Creek Golf Course	Thompson/Okanagan	Advisory
Merritt Golf and Country Club	Thompson/Okanagan	Notice
Pineridge Golf Course	Thompson/Okanagan	Notice
Lacarya Golf and RV Park	Thompson/Okanagan	Advisory
Royal York Golf Course	Thompson/Okanagan	Warning
Sunshore Golf Course	Thompson/Okanagan	Warning
Quaaout Lodge & Spa at Talking Rock Golf Course	Thompson/Okanagan	Warning
Wells Grey Golf Resort and RV Park	Thompson/Okanagan	Warning
Meadow Creek Golf Course	Thompson/Okanagan	Warning
Spallumcheen Golf Course	Thompson/Okanagan	Advisory
Mission Hills Golf Course	Kootenay	Notice
Christina Lake Golf Course	Kootenay	Advisory
Links of Maggie May Golf Course	Omineca	Advisory
Lake Point Golf and Country Club	Peace	Advisory
Salt Spring Golf Course	Vancouver Island	Advisory
Green Acres Par 3 Driving Range	Vancouver Island	Advisory
Hollies Golf Course	Vancouver Island	Notice
Pryde Vista Golf Course	Vancouver Island	Notice
Duncan Meadows Golf Course	Vancouver Island	Warning
Country Meadows Golf Course	South Coast	Advisory
Savage Creek Golf Course	South Coast	Advisory
Mylora Sidway Golf Course	South Coast	Advisory
Sunshine Woods Golf Course	South Coast	Advisory
Quilchena Golf & Country Club	South Coast	Advisory
Greenacres Golf Course	South Coast	Advisory
Kings Links by the Sea Golf Course	South Coast	Advisory
Birdies and Buckets Golf Course	South Coast	Notice