New Zealand Fire Service
Auckland City Fire Area
40 Pitt Street, Newton
Auckland 1010
PO Box 68-646
Newton
Auckland 1145
New Zealand
Phone +64 93025192

26/03/15
Black Dragon Fireworks Ltd


Subject: Pyrotechnic Display - Written Agreement
Venue: ASB Showgrounds
Date of display: 2/04/15------6/04/15

## Agreement Conditions -

No alteration to event details as per your application.
Display can viewed prior to use, if required
Examination of site and surrounds post-firing if required.
All safety aspects of the event strictly adhered to.
The Chief Fire Officer for Auckland City Fire Area agrees to the display in accordance with the Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001, Section (39 outdoor or 44 (2) indoor).

On behalf of the Chief Fire Officer


## Russell Dickson

Fine Risk Management Officer PG Fi
Auckland City Fire Area

New Zealana Fire Service 40 Pit Si Nembit ar. ©hiand


## AHPLICATION TO ATEST CHKTHERKROK AN

## OUTUOOR MROTECINNIC DISPLAY TEST CERTIFICATE



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("mont detaik)


7. Hostponement date(s)



## 8. Approved handler in chorale of the display pyrotechnics

Name
Contact details

9. Test certificate details of approved handier in charge (attach a copy AND complete the following) Approved handler test certificate number

Expiry date

$$
2410116
$$

Valid for hazard class $1.1 母 1.2 \sigma$ 1.3G 1.4 G .4.4S (strike out any that do not apply) Level of Approved Handler (see page 5 for a list of pyrotechnic articles available at each Level)
-Love lT Level 2 Lever 3
(strike out the two levels that do not apply)
Special conditions of test certificate
All


Indoor display<.
Name of Test Certifier who issued the approved handler test certificate

10. List others who will participate under the direct supervision of the approved handler in charge. Include other approved handlers and candidates for approved handler test certificates.
Name (s)

## 11. Attach a copy of the display plan

A copy of the display plan must be attached and include:

- A site plan of the discharge area and the exclusion zone;

Details of arrangements for identifying and securing discharge area and exclusion zone;

- The name of the manufacturer, and the size, type and number of pyrotechnic articles to be used;
- Details of positioning of firing points and mortar tubes and the methods of firing;
- The names and responsibilities of all authorised persons operating the display;
- An indication that the requirements of regulation 42 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001 will be met;
- In the case of aerial displays over 60 m in height, an indication that the requirements of regulation 43 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001 will be met.

12. Notifications (regułation 39 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001)
A. Approval of the Principal Rural Fire Officer (write "NA" if not applicable)

Name
Signature

Stamp

Conditions
B. Approval of the Chief Fire Officer (write "NA" if not applicable)

Name

Signature

Stamp

Conditions
C. Civil Aviation Authority (CAA) or Relevant Air Traffic Control Unit Controlled Aerodromes

- The relevant airtraffic control unit must be notified not less than 5 days prior to a display if the display is to be conducted within 15 km of a controlled aerodrome.
- The releyant air traffic control unit must be notified not less than 5 days prior to a display if the display is more than 15 km from a controlled aerodrome and the projectile height is to be greater than 120 m above surface level.
The controlled aerodromes are those at Auckland, Christchurch, Dunedin, Gisborne, Hamilton, Invercargill, Napier, Nelson, New Plymouth, Ohakea, Palmerston North, Queenstown, Rotorua, Tauranga, Wellington, Whenuapai, Woodbourne.


## Uncontrolled Aerodromes

- The CAA must be notified not less than 5 working days prior to a display if the display is within 4 km of an uncontrolled aerodrome and the projectile height is to be higher than 45 m above surface level
- The CAA must be notified not less than 5 working days prior to a display if the display is more than 4 km from an uncontrolled aerodrome and the projectile height is to be higher than 120 m above surface level.

12. Notifications, continued.
D. Approval of the Harbourmaster (write "NA" not applicable)

Name

Signature


Stamp

Conditions

Pursuant to the Hazardous substances and New Organisms (HSNO) Act 1996, the Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001, and the Code of Practice for Outdoor Pyrotechnic Displays (HSNOCOP30-1), I hereby make an application for a test certificate for an outdoor pyrotechnics display:


Printed name of Applicant

## REMINDER - PRE-DISPLAY NOTHICATION REQUIREMENTS

If you are issued a display test certificate in respect of this application, you must notify the agency responsible for enforcement of the HSNO Act and regulations in the area of the display at least 3 working days prior to the date of the display. See regulation 39 in the Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001 for details.

If the display is for hire or reward, you must notify the Department of Labour. If the display is a volunteer effort, you must notify the local authority with jurisdiction for HSNO enforcement. If the display is to be conducted from a floating platform or if the exclusion zone incorporates any part of a body water you may also need to notify Maritime New Zealand. Contact a test certifier for ađvice on pre-display notification requirements.
(AUCKLAND-CENTRAL) Notifiable Works Reference No. HW10097619
1 message
healthsafety.notifications@worksafe.govt.nz
Thu, Mar 12, 2015 at 10:09
<healthsafety.notifications@worksafe.gov..nz>


NEW


ZEALAN




# Notification of Particular Hazardous Work 

## DO NOT REPLY TO THIS EMAIL ADDRESS

This is an acknowledgernent of the receipt of your notification with reference number HW10097619.

## Nature of Work

- Use of explosives


## Worksite Information

Worksite Address
Main Access Road
Location

ASB showgrounds 217 greenlane Road, Auckland
Greenlane Road
Central tar seal area

## Employer Information

Employer
Employer Address
Employer Contact
Phone Number
Fax Number
Email Address

Black Dragon Fireworks Limited
1325 Kahikatea Flat Road, Kaukapakapa, auckland



## Work Details

Brief Description of Work
Date of Commencement
$5 \times$ fireworks displays at the easter show
Thursday, 2 April 2015

# Certificate of Competancy Details 

Certificate Number
Certificate Holder
Expiry Date
Phone Number
Fax Number
Thank you for providing us with your notification. We use this information to support both longer term analysis of hazardous activity and more immediate workplace assessment planning. You may receive a visit from a health and safety inspector, especially if the combination of hazardous work you are undertaking meets our assessment criteria.

Yours sincerely, Manager, Response Team, WorkSafe New Zealand.
govt.nz - your guide to finding and using New Zealand government services

Any opinions expressed in this message are not necessarily those of WorkSafe New Zealand. This message and any files transmitted with it are confidential and solely for the use of the intended recipient. If you are not the intended recipient or the person responsible for delivery to the intended recipient, be advised that you have received this message in error and that any use is strictly prohibited. Please contact the sender and delete the message and any attachment from your computer.

# BLACK DRAGON FIREWORKS <br> 1325 Kahikatea Flat Road, Kaukapakapa, Auckland. 

15 March 2015
Professional display, job sheet and check list:
Job sheet for ASB showgrounds, Easter Show fireworks display's x 5 to be held on $2 \mathrm{nd}, 3 \mathrm{rd}, 4 \mathrm{th}^{\text {th }}{ }^{5}$ th and $6^{\text {th }}$ of April 2015 at approximately 9.00 pm each night. These are level 2 fireworks displays.

These are 5 separate applications for fireworks displays, however each display is identical save for the date.

Check list:

1. Plan of discharge area. Completed and attached. Please note the exclusion Zone requires 50 metres minimum clearance around the firing zone, we have allowed for up to 60 metres.
2. Area to be secured by temporary wire and mesh fencing and on-site Guards.
3. All display shells will be fired in mortar tube bundles of 20 and 40 , and to be secured in mortar racks which will be secured to timber fixed to the tar seal surface. The cakes will be will be secured to the tar seal in the same manner as the mortar racks. All products will be covered leading up to ignition for rain protection.
4. All products will be fired by remote control and electric ignition method. Power won't be available to the product until 10 minutes to firing, Jason Peters will supervise trainees to fire the fireworks using a remote controlled electronic firing system.

All burnt product will be watered down 20 minutes after firing and cleaned and removed off the site.
6. All mortars and display shells will be used in accordance with regulation 43 of the Hazardous Substances Regulations 2001.
7. All pyrotechnic products will be dealt with in accordance with regulation 42 of the Hazardous Substances Regulations 2001.
8. will be in charge of the display and will make the decision to go ahead with the display having regard to the weather conditions on the
evening of the event. holds a current Approved Handler Test Certificate with a level 2 category.
9. The cakes and display shells, are products supplied from the Wangton Fireworks company in china, and imported to New Zealand by Black Dragon Limited. The products are both 1.4G and 1.3G
10. All relevant parties have been informed as required by the Act, and as a matter of courtesy and safety precaution additional parties have also been notified. These include the following:

Auckland central Fire Chief - application
Auckland City Council - application
Westpac Helicopter -
Coastguard -
Auckland Central Police
Department of labour - application
Greenlane hospital
Auckland International Airport.
CAA

Other:
All safety precautions will be taken to provide a safe display. There will be a number of staff with fire fighting gear including:
$1 \times 15$ litre water spritzers
$3 \times 9 \mathrm{~kg}$ fire extinguishers
Torches
$1^{\text {st }}$ aid kit
Fire blanket
Ear plugs
The event will only go ahead if the wind is below $30 \mathrm{~km} / \mathrm{hr}$ and the certified handler deems it safe enough to fire.

There will be a number of static guards available at the event to keep the public out of the exclusion zone.

There is a full safety plan attached to this application including Company safety policy.

Once the display has been fired, and a 20 minute cool down period has ended, will inspect the burn product, water down any hot spots and the area will then be cleared of debris.

List of pyrotechnic products:

- $80 \times 2.5^{\prime \prime}$ display shells per display
- $24 \times$ large ground cakes per display

Total products $=104$ per display

# BLACK DRAGON FIREWORKS 

1325 Kahikatea Flat Road, Kaukapakapa, Auckland

Display staff responsibilities:

DISPLAY NAME: ASB Showgrounds $x 5$ display's 2nd ${ }^{\text {th }}$ April to 5th April 2015
ADDRESS: ASB Showgrounds, 217 Greenlane Road East, Auckland.

| APPROVED HANDLER | NO. | RESPONSIBILITIES |
| :--- | :--- | :--- |
|  | O4-A224 | Overall in charge, including health and safety officer, post <br> firing inspection all products, client and officials liaison and <br> all incoming enquiries, display initiator and instructor for all <br> trainee staff, |
|  |  | Trainee |
|  | Trainee | Assistant health and safety coordinator, wiring assistant, <br> post display clean-up assistant, general hand. |
|  | Trainee | Wiring assistant, safety equipment coordinator |
|  | Trainee | Weneral hand |
|  |  | Wiring assistant, security guard, fire fighter assistant <br> coordinator |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## Firing sequence for ASB Showgrounds event 2 to 6 April 2015

Date of Display: 17 to 21 April 2014, 5 displays, the firing sequence below is for one of the five displays, and all displays are identical.

NB: No postponement date.
Display style: All product preloaded, wired and electric fired.


## Black Dragon Safety Plan Template

Date of display:
Activity:
Location:
Group size:
Duration:
Specific problem areas

- Explosion
- Injury
- Fire
- Security breach

Risk factors:
-outsiders entering exclusion zone
-Accidental ignition

2 to 6 April $2015 \times 5$ identical displays
Fireworks Display
ASB Showgrounds, Greenlane West.
Up to 6 persons
5 minutes

Risk Management

Security staff, trained
Defined no go area
Signage
Warning devices
Trained staff only/technicians
No flammable/ignition sources
Fire fighting gear at hand
First aid at hand
Tidy work space
Tool check
Protective clothing
Segregation
Work area layout
Escape plan
Safety gear
Staff briefing
Check list
Rubbish bins
Pre-event weather update
All weather gear
Contingency location
Drinking water
Food and refreshments

Fatigue
-Explosion

Same as above, food, drink etc
Rest area
Rest allocation
Drugs and alcohol banned

Adequate exclusion zone. (Defined under legislation, HSNO Act 1996)
Fire fighting equipment
Trained staff.

## Equipment:

All safety equipment will be readily available at all fireworks locations including the firing point. Safety equipment includes the following:
$3 \times 9 \mathrm{~kg}$ dry powder fire extinguishers
$1 \times 15$ litre water/weed sprayers
1 x fire blanket
$2 \times$ large first aid kits
Chilly bin
Drinking water
Buckets
Ice
Personal protection equipment including:
Non-synthetic clothes
Gloves both leather and cotton and damp is preferable
Head torches
Hi-vis vests
Sun glasses
Hats
Sun block
Safety helmets
Ear plugs and muffs
Safety glasses
Safety boots and wet weather gear.
Other general equipment:
Marquee
Table and chairs for breaks
Clip boards
Water proof paper for rigging lists
Pencils

Environment:
Contamination of air Smoke only but limited.

Emergency plan:
Each site for pyrotechnics displays require "site specific" emergency plans. The subject site is well protected with a 1.8 metres wire and mesh hording around the outside boundary of the site and a 1 metre wire and mesh fence on the inside boundary of the exclusion zone.

Mobile guards will be placed inside the lower fence portion and less guards on the outside boundary fence

The exclusion zone is also enlarged as the site offers the extra space. The required exclusion zone for this level of pyrotechnic product is 50 metres. This site will have an exclusion zone of over 50 metres and around 60 metres.

The subject site removes a large amount of the usual hazards such as buildings, vehicles, dry grass, product failure issues etc as it is placed on a tar seal car parking area

The emergency plan on this site after applying the 3 main principles of risk management for pyrotechnic displays, is related to the 4 items mentioned above

- Explosion
- Injury
- Fire
- Security breach

The three main principles to be applied are

- Recognition
- Evaluation
- Control

Elimination of risk is the main focus of Black Dragon fireworks. The main risk times associated with fireworks are:

- Transport of fireworks.
- Storage on site
- Safety while rigging
- Safety while hardwiring
- Safety during firing
- Safety while cleaning up

Persons identified most at risk are the pyro technicians and their labourers. The public are also at risk at certain times, however, most of that risk has been eliminated through legislation, training and certification.

Health and safety plan Black Dragon Fireworks:
Equipment:
(Listed above)
Fire fighting
First aid
General
Personal

Responsibilities:
Overall officer in charge of operations $\square$
$2^{\text {nd }}$ in charge-
$1^{\text {st }}$ aid officer, responsible for signage and administering first aid -
Fire officer nominated, at least 2 trained

Main injury concerns:
If an injury or emergency occurs the following Principles are to be followed:

## Make safe

Identify
Act
Assess

1. "Make safe" Make sure there is no further threat of injury to any person.
2. "Identify" Assess what the injury or injuries are. what is it, burn, cut, eye injury, hearing etc
3. "Act", what is needed, take the most immediate action i.e., burn, cold water
4. "Assess" Once initial control is in place, assess the injury and make a decision on the further action required.

Minor injuries will normally be treated on-site by first aid qualified staff
Moderate injuries will also usually be treated on-site but may require some additional or specialist follow-up treatment and or medication that is not available on-site. Examples of these injuries are:

Back injuries

Eye and ear injuries
Deep cuts requiring stitches
Allergies
Etc
Major injuries will require offsite treatment and emergency services. In all displays those emergency numbers will be readily available along with cell phone or landline coverage.

Catastrophic injuries, such as death, toxic gas release major fire etc will mean immediate life preservation measures and those other lives around you.

NB: Where the injury is life threatening or the victim is not conscious remember the first aid principles:
A B
C

Airway
Breathing
Circulation

In all cases, a written record will need to be completed at the first safe opportunity.
The most common injuries on display sites are:
1 Cuts
2 Burns
Prior to leaving for the display job the person in charge of the display will appoint a first aid person who will be responsible for checking that all first aid equipment is up to capacity and in particular is heavily loaded with burn medication and treatment material and ample butterfly plasters, needles and stitch cord, a good range of bandages, savlon and a warm blanket.

Remember!!!
KEEP THE VICTIM WARM

Additional Black Dragon fireworks health and safety policy points:
All staff are responsible for the safety of themselves and others on display contracts

- Prevention and caution are better than rectification and treatment
- All staff are responsible for keeping all other persons out of restricted areas, polite but firm and assertive.
- Clean-up and clearance of the display area is as important as setting up the display.
- $\quad$ Report and record all incidents, even if trivial.

Policies and Guidelines:

- $\quad$ Principles of First Aid
- $\quad$ Code of practice for outdoor pyrotechnic Displays (HSNO Act 1996) chapters 3, 5, 6,7,9 and Appendix 3 and 10
- Department of Labour, Emergency procedures - stop, think, act
- Reprint dated 9 June 2005 HSNO Act, Hazardous Substances (Classes 1 5 Controls) Regulations 2001
- Reprint 9 June 2005 Hazardous Substances and New Organisms (Personnel Qualifications) regulations 2001.
- Black Dragon Fireworks internal training guidelines.


# BLACK DRAGON FIREWORKS 

1325 Kahikatea Flat Road, Kaukapakapa, Auckland

## 15th April 2015

Roy Warren
Senior fire Safety Officer

2 Poynton Terrace

Newton

Auckland
Dear Roy
RE: 5 FIREWORKS DISPLAYS OVER THE EASTER BREAK AT THE ASB SHOWGROUNDS, GREENLANE, AUCKLAND.

As required under the 'Hazardous Substances and New Organisms (HSNO) Act 1996, please find enclosed my application for a test certificate, for $5 \times$ fireworks displays, to be held over the Easter period, at the ASB Showgrounds.

The displays are set down for between 8.30 pm and 9 pm on the $2 \mathrm{nd}, 3^{\text {rd }}, 4^{\text {th }}, 5$ th and 6 th of April 2015, at the showgrounds inside the arena or parking area. The displays are level 2 only, with the highest flying display shell at 40 to 60 meters height.

All other relevant parties have been informed and enclosed are the following documents:


- Application for test certificate
- Firing sequence
- Firework product plan
- Check list
- Health and safety plan
- Copy of approved handlers certificate, Jason Peters
- Department of Labour notification
- CAA notification

The displays on each night from the 2 nd to the $6^{\text {th }}$ of April, are identical, including the product and firing time of approximately 4 to 5 minutes each, however I am required under the act to make 5 separate test certificate applications, and I will need confirmation from the fire Chief for all 5 displays. I have only sent you a copy of one display application, but will need to attach a copy of your confirmation letter on all five applications, when I receive it.

I trust the above meets your requirements, please don't hesitate to contact me if you require any further information and thank you for your assistance in this matter.

## Regards


(Approved Handler)


## APPROVED HANDLER TEST CERTIFICATE

Issued pursuant to Section 82 of the Hazardous Substances and New Organisms Act 1996


This certificate is issued in accordance with Regulation 40 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001. This certifies that the handler has met the relevant requirements for the substances and lifecycles specified below:

| Substances / Classes: | Lifecycles : |
| :--- | :--- |
| Pyrotechnics | 1.3G. 1.4G. 1.4S, |
|  | USE: TRANSPORT: STORAGE: DISPOSAL: |
|  | Maximum Aerial Shell 125mm. |

## Conditions:

Unless surrendered or revoked beforehand, this certificate shall remain in force until
24/01/2016 and may be renewed thereafter by an authorised test certifier.
This certificate must be produced at the request of an enforcement officer appointed under the HSNO Act 1996.

## Special Conditions :

The certificate is limited to handlers in control of substances used in:
X Outdoor pyrotechnic displays $\square$ Indoor pyrotechnic displays
The certificate is limited to handlers in control of :

- $\square$ Level 1 Level 2' $\square$ Level $3 \square \mathrm{~N} / \mathrm{A}$


## . Outdoor pyrotechnics only

The certificate is limited to handlers in control of the following display types:


Signed :

Date: $24 / / / 1$
Test Certifier No. TST 000004
Ph. 045288384
Fax. 045288394

ASB Showgrounds 2015 Easter show and to $6^{\text {th }}$ April $S \times$ Displays 9pm each night.

Frevo-fes plan.
$12 \times$ Ground Cakes
$12 \times$ Ground Cakes


$$
\begin{aligned}
40 \times 2.5^{\prime \prime} & \begin{array}{l}
\text { Display } \\
\\
\\
\text { Shells }
\end{array}
\end{aligned}
$$

# BLACK DRAGON FIREWORKS 

## 1325 Kahikatea Flat Road, Kaukapakapa, Auckland

15 March 2015

The Manager Aeronautical Services
Civil Aviation Authority
P.O Box 3555

Wellington 6140

RE: 5 X FIREWORKS DISPLAYS 2nd to 6th of April 2015 AT THE ASB SHOWGROUNDS, GREENLANE ROAD, EPSOM.

Please find enclosed, a 'Notice of Proposal to Use Pyrotechnics' under CAR Part 77, for 5 x fireworks displays to be held at the ASB Showgrounds over the Easter break.

The displays will be held at 8.30 pm to 9 pm on the evenings of the $2^{\text {nd }}, 3^{\text {rd }}, 4^{\text {th }}, 5$ th ${ }^{\text {h }}$ and 6 th of April 2015.

All of the displays are identical in terms of the fireworks product to be used and all displays will last for approximately 5 minutes.

The display will largely be made up of $2.5^{\prime \prime}$ shells and ground cakes. The $2.5^{\prime \prime}$ shells can reach heights of 80 metres, but generally fly to about 40 to 60 metres.

I trust the above meets your requirements, please don't hesitate to contact me if you require any further information.


## Notice of Proposal to use Pyrotechnics or Weapons - CAR Part 77

This form is to be used to notify CAA of a proposal to conduct a pyrotechnics display or use weapons that involves the firing or launching of a projectile that has a trajectory higher than:

- 45 m AGL if within 4 km of an aerodrome boundary; or
- 120 m AGL if more than 4 km from an aerodrome boundary.*
*This notification is not required if the proposal to stage a pyrotectnic display or use of weapons in an air traffic control zone when the ATC unit is on duty, in which case the proposer must obtain prior authorisation from that ATC unit at least 5 working days prior to the activity.

This notification is to be submitted to the CAA at least 5 working days notice prior to the proposed date of the activity.
The CAA Standard Rate hourly charge applies.

## 1. Proposer Details



## 2. Nature of Proposal



## 3. Description of Proposal

Complete description of proposal. Examples of details required are:
(a) types of pyrotechnical devices or weapons to be used;
(b) height range of burst type pyrotechnics or shells;
(c) site or event details.



## 5. Certification

I hereby certify that all the above statements made by me are true and complete to the best of my knowledge.


Printed Name


The notice required shall be made by submitting this form to:
Manager Aeronautical Services
Civil Aviation Authority
PO Box 3555
Wellington 6140
The notice may also be submitted to: fireworks@caa.govt.nz

