



THURSDAY 21 NOVEMBER 2019

## The Management of Operational Risks from Cemeteries and Crematoria

The ICCM and Cemetery Development Services Ltd (CDS) are holding a one-day Seminar exploring several topics relating to the management of operational risks from cemeteries and crematoria.

### The topics to be discussed are:

- Management and removal of grave soil arisings
- Gas vs electric cremation
- UXO management and safety in cemeteries
- Cemeteries and groundwater contamination
- Notifiable weeds – risks and management

There will also be a discussion forum at the end of the Seminar where you can raise and discuss any concerns or issues.

The aim of the seminar is to inform burial and cremation authorities of their roles in dealing with some of the risks presented in cemeteries and crematoria. Spaces are limited and will be allocated on a first-come, first-served basis.

Attendance, including lunch and refreshments, is £95.00 + VAT for ICCM members, and £125.00 + VAT for non-members.



Programme, Paper and Speaker Notes, and Booking Form below



An ICCM and Cemetery Development Services Ltd event

One day seminar

Important updates for all cemetery and crematorium operators

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Wrest Park  
English Heritage  
Silsoe  
Bedfordshire  
MK45 4HR

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# THE MANAGEMENT OF OPERATIONAL RISKS FROM CEMETERIES AND CREMATORIA

21<sup>ST</sup> NOVEMBER 2019

Wrest Park • English Heritage • Silsoe • Bedfordshire • MK45 4HR

## SEMINAR PROGRAM

TIME	ACTIVITY	PRESENTER
9:30 – 10:00	<b>Registration</b>	
10:00 – 10:10	<b>Introduction</b>	CDS/ICCM
10:10 – 10:50	<b>Management and removal of grave soil arisings</b> What is the legal status and your responsibilities under contaminated soil legislation for the movement and use of grave soil arisings?	Southern Testing Ltd
10:50 – 11:30	<b>Gas vs electric cremation</b> As environmental demands increase, is the electric cremator the future for greener, cleaner cremation?	DFW Europe
11:30 – 12:00	<b>Coffee break</b>	
12:00 – 12:40	<b>UXO management and safety in cemeteries</b> If you operate near to a major city, or wartime strategically important site, it is likely that unexploded ordnance is a threat in your cemetery. What are your responsibilities?	MACC International
12:40 – 13:40	<b>Lunch Break</b>	
13:40 – 14:20	<b>Cemeteries and groundwater contamination</b> Legislation has a purpose. Groundwater monitoring on several sites are showing levels of contamination being above legal levels. What are your responsibilities?	CDS
14:20 – 15:00	<b>Notifiable weeds – Risks and management</b> Japanese Knotweed and Giant Hogweed as well as other pernicious weeds are often considered as notifiable is this true and what is your legal duty if you find them on site?	Syntegra
15:00 – 15:15	<b>Summary</b>	ICCM
15:15 – 16:00	Discussion forum	

### FURTHER CONTACT DETAILS:

**Cemetery Development Services Ltd.  
(CDS)**  
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01525 864387

**Institute of Cemetery and Crematorium Management  
(ICCM)**  
[julie.dunk@iccm-uk.com](mailto:julie.dunk@iccm-uk.com)  
07976 939585

## MANAGEMENT AND REMOVAL OF GRAVE SOIL ARISINGS

**Speaker: Robert Jiagge - ST Consult**

All cemeteries have a perennial problem with the disposal of excess subsoils from graves. Some materials are used for infilling and topping up before dressing out. Whilst the majority of soil material not used for topping up is removed off site by a local “muckaway” company, some material is removed from one site and transferred to another area.

The legalities of soil disposal and movement is complex under current permitting regulations. This presentation reviews the classification of grave soil arisings and your legal requirements in the removal and movement of what may be contaminated material.

### **About the speaker:**

Robert is an Environmental Geologist and a Chartered Scientist who specialises in land conditions. At present, Robert is the Regional Manager at Southern Testing, Thames Valley Regional Office in Hannington, near Kingsclere, Hampshire.

For the past 15 years, Robert has been involved in a wide range of projects involving ground investigation, assessment and remediation of brownfield land and providing numerical and analytical solutions to both complex and simple sustainable redevelopment projects.

Some of the key highlights are project management, production of desk studies, quantitative risk assessment reports for human health and controlled waters; remediation strategy and verification of remedial works.

Robert is a Qualified Person (QP) under CLAIRE DoWCOP (The Definition of Waste: Development Industry Code of Practice) and has an extensive experience in materials management and classification of hazardous waste.

## GAS VS ELECTRIC CREMATION

**Speaker: Sjaak Zutt - DFW Europe**

With the pressure on greener fuels and reduced emissions to improve air quality, the pressure for the sector to clean up the cremation process continues.

Notwithstanding regulatory controls, all local authorities are looking at green initiatives and the use of fossil fuels (gas) are being discouraged in favour of sustainable energy sources such as solar, wind and wave power.

The use of electric cremators powered by renewable and sustainable green energy sources, may provide a significant milestone in greener cremation. The presentation will review gas and electric cremators covering.

- Design differences
- Running costs comparisons
- Emissions comparisons
- Green energy comparisons
- Noise levels

### **About the speaker:**

Sjaak Zutt, has been Technical Manager at DFW Europe since November 2017.

- More than 30 years' experience in technics
- Of which about 15 years' experience in combustion technology at the Energy Research Centre of the Netherlands.
- 10 years Chief Engineer at ENATEC micro cogen. A company who designed Stirling engines for Micro CHP applications in close cooperation with Bosch, Rinnai and Ariston.
- 6 years Customer Application Engineer at Microgen Engine Corporation. A company who produced Stirling engines.

## **UXO MANAGEMENT AND SAFETY IN CEMETERIES:**

**Speaker: Carl Percival - MACC International**

Did you know (according to the BBC) that during the Blitz, the Germans dropped about 24,000 tonnes of explosives? But 10% of the bombs didn't actually detonate! During the second world war Southampton alone had 30,000 incendiaries and 2,300 bombs dropped onto it during the course of the conflict. Seventy years after the end of conflict, tens of thousands of unexploded ordnance (UXO) may still be present beneath private gardens, roads and buildings around the target sites and this does not exclude cemeteries.

These ordnances are often more dangerous now than they were during the war.

Just a few years ago an anti-aircraft shell was discovered in one of Southwark Council's cemeteries during a redevelopment project.

UXO surveys are required as part of health and safety audits prior to construction in many developments close to bomb sites. Digging a fresh deep grave for all intense and purposes is a construction exercise. Would your grave digger be aware of the dangers? Have you advised them accordingly as part of your Health and Safety Risk Assessment? Probably not!

Carl Percival from MACC International, one of the UK/s largest UXO consultancies, will steer you through this subject, identifying risks and your responsibility to staff and public safety.

### **About the speaker:**

Mr Percival joined MACC with 17 years' experience in the commercial EOD and Explosives Engineering Industry, prior to which he had served 9 years of exemplary service in the Royal Engineers as an EOD Operator. Since commencing with MACC he has provided invaluable management support to the majority of the company core and allied activities. He is a highly respected manager, well-motivated and adaptable with extensive experience in all aspects of:

- Explosive Ordnance Disposal (EOD)
- Humanitarian Demining & Post Conflict Clearance
- Explosive/UXO Engineering Project Management & Risk Assessment
- Demolitions, Pyrotechnics & Shot Firing
- Explosives design, manufacture, storage & Transport

Mr Percival currently holds the post of Support Manager with MACC, in addition to his managerial responsibilities his duties extend into field operations covering many of the company's activities. He is directly responsible for the following aspects of company business on a day to day basis.

- Logistic Management & Procurement
- Explosive Demolition Systems Design
- Explosives Legislation Compliance
- Project Logistic Support
- Internal Auditor (ISO)
- EOD Incident/Accident 1st Responder/Investigator

## **CEMETERIES AND GROUNDWATER CONTAMINATION.**

**Speaker: Darryl Kelly – CDS Environmental**

The protection of groundwater resources is an essential role which the Environment Agency manages across the UK. Cemeteries are essentially a significant source of pollutants which can impact sensitive groundwater resources and surface water features and are accordingly managed by a series of publications and a set of statutory guidance from the EA, which all operational cemeteries must follow.

In addition to the risk to groundwater and surface water from burial contaminants, greywater associated with burials also poses a potential risk to both groundworkers and mourners due to the potential for biological contaminants to be present in the water which can cause serious infections such as sepsis.

CDS have assessed the details of over 200 historical and current cemetery feasibility studies, investigating the common factors which have the greatest impact on whether a cemetery would be considered a low, moderate or high risk site, with respect to the risk to the underlying groundwater.

Groundwater monitoring and sampling undertaken by CDS Environmental on a number of sites across the UK is starting to illustrate the type and source of pollution risk in burial sites. This information is used to provide the EA reference points for their decision-making process as to whether a new site can be developed, an existing site be extended or whether an existing site should be closed.

The presentation illustrates examples of how, if you are a high-risk cemetery, you can mitigate to prevent closure of your site.

If you dig graves and hit groundwater, then this presentation is for you!

#### **About the speaker:**

Darryl joined CDS as Technical Director in August 2018, with a Masters degree in Geology from Southampton University and a background in of 11 years in site investigation, undertaking a range of both geotechnical and geoenvironmental investigations including investigations of large scale sinkholes and ground stability issues and remediation of former Gas Works sites, Oil Refineries and radioactive land assessment.

Darryl's responsibilities at CDS include undertaking the Environmental Assessments on a range of sites across the UK including existing and proposed cemetery sites, crematoria development sites and a wide range of other land uses including parks and open space and reclamation of previously contaminated land.

## **NOTIFIABLE WEEDS – RISKS AND MANAGEMENT**

#### **Speaker: Trish Holden - Syntegra**

Japanese Knotweed and Giant Hogweed are becoming prevalent in both existing and new cemetery site developments and if present can cost many thousands of pounds to control. Japanese Knotweed is known for its potential damage to structures, but Giant Hogweed is dangerous because its sap is harmful to humans through its ability to cause skin inflammations. The resulting burns can last for several months and, even once they've gone, skin can remain sensitive to sunlight for years to come. Harm caused by Giant Hogweed to members of the public or staff on your site can make you liable landowners. You need to beware of a rise in the number of public liability cases if the invasive plant is not dealt with properly.

Moving and importing soils can spread notifiable weeds and may be associated with previous speakers' coverage on legal requirements on soil movements into and from cemeteries.

This talk will introduce you to a number of notifiable weeds, your duty of care, and how they can be managed.

#### **About the speaker:**

Patricia is a consultant ecologist and full member of IEEM. She has over fifteen years' of professional experience gained in the commercial and private sectors. She has project managed and undertaken numerous extended Phase 1 habitat surveys and multi-species surveys across the UK including: solar farms for Orta Solar along the M4 corridor and A303, cemetery expansions and new cemetery sites for CDS, large scale residential developments for various private and commercial clients.

She holds particular experience and expertise in surveying for a range of protected species including reptiles, great crested newts, badgers, riparian mammals, and bats. In addition to Preliminary Ecological Appraisals, Protected Species Surveys and Habitat Assessments, Trish has also designed management plans for large scale regeneration schemes.

# Booking Form

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I wish to attend/send the following delegate(s) to the Management of Operational Risks from Cemeteries and Crematoria Seminar at Wrest Park on Thursday 21 November 2019:

	Member of ICCM
Name 1: _____	Y/N
Name 2: _____	Y/N
Name 3: _____	Y/N

Representing: \_\_\_\_\_

Email: \_\_\_\_\_  
Confirmation of attendance will be sent by email

Address for invoice: \_\_\_\_\_

Order No: \_\_\_\_\_ Phone No: \_\_\_\_\_

Any Special Dietary/Access Requirements: \_\_\_\_\_

The fee for the event covers attendance, documentation, lunch and refreshments. The fee is £95.00 + VAT for ICCM members and £125.00 + VAT for non-members. The ICCM member rate also applies to both corporate and professional members of the ICCM.

Please do not send cash or a cheque with the booking form – an invoice will be sent to you at the address given above.

Cancellations and refunds – receipt of the completed booking form is a contract. Cancellations must be made in writing at least 10 working days before the event and will incur a 20% administration fee. Cancellations made after 10 working days before the event will not be refunded. No refund will be given for non-attendance. Substitution of delegates at no extra charge may be made by emailing [julie.dunk@iccm-uk.com](mailto:julie.dunk@iccm-uk.com). In the unlikely event of cancellation by the organisers, any fees paid will be refunded but no further liability will be accepted. The organisers reserve the right to make changes to the programme, speakers and venue should this be necessary.

Please return completed forms to Julie Dunk at [julie.dunk@iccm-uk.com](mailto:julie.dunk@iccm-uk.com)

or to ICCM National Office, City of London Cemetery, Aldersbrook Road, Manor Park, London, E12 5DQ

Telephone enquiries to Julie Dunk on 07976 939585