

# DDAS Accident Report

## Accident details

<b>Report date:</b> 25/08/2016	<b>Accident number:</b> 812
<b>Accident time:</b> 10:45	<b>Accident Date:</b> 17/05/2016
<b>Where it occurred:</b> Risk Area 12, Tal Al-Rabiea Village, Daquq, Kirkuk Governorate	<b>Country:</b> Iraq
<b>Primary cause:</b> Other (?)	<b>Secondary cause:</b> Management/control inadequacy (?)
<b>Class:</b> Handling accident	<b>Date of main report:</b> Not recorded
<b>ID original source:</b>	<b>Name of source:</b> Iraqi Kurdistan Mine Action Agency
<b>Organisation:</b> FSD	
<b>Mine/device:</b> IED	<b>Ground condition:</b> dry/dusty; hard
<b>Date record created:</b>	<b>Date last modified:</b> 25/08/2016
<b>No of victims:</b> 1	<b>No of documents:</b> 2

## Map details

**Alt. coord. system:** Not recorded      **Coordinates fixed by:**

## Accident Notes

PPE not used  
inadequate area marking (?)  
inadequate investigation (?)  
visor not worn or worn raised (?)  
inadequate communications (?)

## Accident report

A formal Bol report from the Kurdistan Mine Action Agency was made available in 2016. Some of the formatting and pictures have been removed. The original is held on file. The substance of the report is reproduced below, edited for anonymity. Press reports are under Other Documents. Text in square brackets [ ] is editorial.

## Formal report

### 1. Administrative Order:

According to the administrative order numbered 811 and dated on 19/05/2016 and according to the authorization given to us at the directorate of technical affairs related to discovering the facts about the IED explosion caused passing away to a person on 17/05/2016, who was working for [Name removed] organization. Therefore, our board held a meeting on 22/05/2016 at the site of the accident.

The Board is consisting of the following members:

1. [Name removed], IKMAA/(GDTA), Head of Committee
2. [Name removed], IKMAA/GDTA, Member
3. [Name removed], [Name of other INGO removed], Member
4. [Name removed], IKMAA/GDMA/Sule, Member
5. [Name removed], [Name of INGO involved removed], Member

## **2. Introduction:**

On 17/05/2016 the operation manager of [Demining organization involved] has contacted us by telephone to inform about explosion of an IED in their worksite or the risk (Hazard) area 012 in the village of Tal Al-Rabiea /Daquq /Kirkuk and after the call, the in-charge person of Quality Assurance: [Name removed] and his assistant: [Name removed] we have moved toward the location in order to collect necessary information and taking the photos of the place of the incident. According to the information gained by the board it was found that the affected person: [the Victim] has intended to render some IEDs safe by using a method to defuse and drag of 8 IEDs. The affected person has used the detector VMH3CS to make more sure about detecting the IEDs. He has also made risk assessment for his work before commencement. He also asked all the personnel to get away from the place by a safety distance. He has rendered the first IED and handled the defuse to the team leader and then he asked again the personnel to get away from the place by an appropriate safety distance. At the time he was working on rendering the second safe (IED), the explosion took place.



The first IED was defused by [the Victim].

[A picture of the VMH3S detector (intact but bloody) has been removed.]

## **3 Information about the affected person:**

The affected person [Name removed] born at 1958 at Australia whose blood type is B+, married with having one child. The latter has worked in different countries like: Somalia, Chad, Liberia, Laos, Congo) and was an expert person. In addition, he has worked for [Other INGO] as an expert in the field of EOD during 2008. In 2015, he has returned back to Kurdistan with [the INGO employing him at the time] and has worked as Supervisor and training teacher in the field of IED.

## **4. History about the risk area and topography of the land**

The risk (Hazard) area 012 is located within the village Tal Al-Rabiea /Daquq /Kirkuk. This area has been bombed by the terrorist organization of DAISH (ISIS) during 2015 by different types of booby traps, IED and different types of traps could be seen at the sites.

[Demining INGO] on 15/03/2016 have started working and they have rendered more than 400 IEDs safe and destructed them.

The nature of the land in this risk area is a large plain and leveled with existence of an earthy screen. Type of the land is hard and because the worksite is burned, there are very few grasses in the area and the village itself is totally destroyed.



[Picture showing hard, dry ground with little vegetation.]

#### **5. Time and Location of the accident**

The accident is taken place on 17/05/2016 at 10:45 am after 5 shifts of working as for each shaft there was 45 min working and 15 min resting. The location of the accident is consisting of a working box rendered safe and marked. The marking has no problems and it is according to the SOP, which indicates that marking has no relation with the accident neither has any effects on it.

[As with the photograph above, another picture failed to show any significant area marking.]

#### **6. Monitoring Process:**

At internal level of monitoring on the date of the accident both teams: [Name removed] 1 and [Name removed] 2 have worked together side by side in the same risk area and the teams had no structural problems. At the same time, the affected person is at a high level of responsibility and during the work he has taken the team leader [Name removed] with him for assistance.

At external level of monitoring the QA teams belonging to IKMAA had the following notes about the worksite:

a) On 05/05/2016 there were some notes about the destruction works and especially what are related to safety distance, existence of more people at the time of charging preparations and also the truck, which is carrying the explosives has to be set far from risk area.

b) On 15/05/2016 the in-charge person of QA has some notes like number of the visitors at one time and creating crowd around and it was also asked that during the explosions no one has to be left around for a distance of 100m. Also, allowed personnel and expertise have to render the IEDs safe.

#### **7. Reasons of the accident:**

Our board has concluded that there are no technical mistakes in the process of technical work and rendering and most probably a personal mistake of the affected person. It is unclear which reason has caused the accident but the following reasons could be among them:

1. The position, which the affected person was sitting (kneeling) and there is a probability that he might have lost control of his balance body and fell ahead directly on the pressure plate and this is one of the strongest reasons led to the accident.
2. There is probability that because of the high temperature of 40 degree C the affected person has had dizziness and that led to him fallen on the mechanical part of the explosion.
3. There is also probability of a heart attack, which led to confuse him and fell.
4. There is also probability of any other hidden reasons that might have caused a psychological disturbance for him and he was not fully aware about the work he is doing and he put a hand on the mechanism part of the explosion.

#### **8. Protection Equipment and other Equipment:**

In the process of rendering IEDs safe, Protection Equipment and Clothes are really not so important. The affected person was not wearing protection equipment and clothes except a pair of suitable boot for the work he was doing.

#### **9. Accident Response Process:**

Because the affected person has died at once and his body fragmented into pieces the process of accident response was not implemented and only fleshes from his body and part of his body were discovered and collected and his right leg was fallen in the risk area and by opening lines the operation team could get it out to safer areas and handed to the police department in Daquq and from there to the Morgue in Kirkuk, a day after was sent to Erbil and on 29/05/2016 the body was sent back to Australia.

Part of [the Victim's body is fallen in the risk areas and one of the operators is trying to get it out.



Access lines to the body

#### **9. Board Recommendations:**

1. The person who does the rendering works has to be sure from psychological point of view that he can do the work.
2. The person who works in rendering IEDs safe has to make pre assessments and be sure what type of work and explosive he is dealing with.
3. For any IED, when the expert is not so sure about the results of his work or even the explosive itself, it should be destructed at it location.

4. The person in charge of the IED has to be fully aware about the work of the mechanical part of it so that he can find the best ways to render it safe.
5. The person who renders the IED safe has to be in a stable position and before starting with any work he has to make sure that he sits in a way he can reach all the parts of the IED and to keep the body balance.
6. In case of IED rendering safe, the other personnel have to be kept away from the IED by an appropriate distance.
7. The person has to avoid from doing any excavation works around the pressure plate until the bomb/bombs are defused.
8. The process of defusing bombs are preferably to be done at the morning times.
9. Since the majority of the fuses are electrical, nylon clothes are not recommended for the person who does the work and there should be discharging process in that case.
10. It is better that another person/expert has to be around to warn the person who does the rendering work or to tell about any mistakes he is going to do.

#### **10. Conclusion:**

The conclusion of the report is that the reason behind the accident is personal from the affected person [the Victim] who has died at the location of the explosion and his body scattered apart because of the strength of the explosion.

Because of the accident, [Demining INGO] that is working with only 2 teams have all to take another extra 3 days refresh training on the circumstances of the accident and reasons behind that accident and also on the levels of the risk as well as taking safety factors into accounts in general follow up.

#### **11. Documentary Photos of the Accident's location:**

Explosion location and VMH3CS [Removed]

At the same date of the accident, QA team is there to gain the prime evidences.



BOI Members at the location of the explosion

[Several other pictures the investigators at the scene have been removed along with a portrait photo of the Victim.]

The board in action Personnel

[4 member's names removed.] [Head of board name removed].

## Victim Report

<b>Victim number:</b> 1015	<b>Name:</b> [Name removed]
<b>Age:</b> 58	<b>Gender:</b> Male
<b>Status:</b> supervisory	<b>Fit for work:</b> DECEASED
<b>Compensation:</b> Not made available	<b>Time to hospital:</b> N/A
<b>Protection issued:</b> None	<b>Protection used:</b> None

### Summary of injuries:

COMMENT: Severe body disruption. Only one leg was recovered. No medical report was made available.

### Other documents

<http://reliefweb.int/report/iraq/international-demining-expert-killed-work-accident-governorate-kirkuk-republic-iraq>

[Demining INGO's Press release: note date.]

International demining expert killed in a work accident in the Governorate of Kirkuk, Republic of Iraq. This morning, at around 10 am local time, an uncontrolled explosion has tragically killed the Australian Supervisor of a team of 30 national deminers during ongoing operations, close to Kirkuk, north of Bagdad. None of the other colleagues were harmed in the accident. The team was in the process of defusing explosive devices, which they detected in the former battle area. A full investigation into the cause of the accident has been opened, in cooperation with the national demining authorities and police forces. After a first assessment at the place of accident, involvement of any third parties appears to be excluded. The deceased has been working in the area for six months already and was a very seasoned explosive and demining expert with several decades of experience in this technical field.

The deceased and his team are part of an ongoing operation of the [Demining INGO] which aims at clearing improvised explosive devices (IEDs), left behind by the so-called Islamic State when they retrieved from the areas about 12 months ago. The operations are fully coordinated with the competent national authorities and financed by international donor governments.

[Demining INGO] is an international mine action organization based in Geneva, Switzerland. This private, independent, and non-profit organization was created in 1997. Since then, it has implemented a large number of mine clearance projects in more than 15 different countries. The overarching aim of [Demining INGO]'s operations is to alleviate and diminish the social, economic and environmental impacts of landmines and unexploded ordnance, thus creating favourable conditions for the reconstruction and development of war-torn countries.

Contact: [Name removed]

17.5.2015 [sic]

<http://www.smh.com.au/world/australian-charity-worker-killed-in-iraq-defusing-islamic-state-bomb-20160517-goxi1s.html> 18th May 2016

An Australian expert working for a land mine clearance charity has been killed in northern Iraq while trying to defuse a bomb planted by Islamic State militants, his colleagues say.

The man was killed yesterday while working for the non-profit [Demining INGO] in the Daquq area, around 200km north of Baghdad. Islamic State were driven out of Daquq last year but left behind hundreds of improvised explosive devices.

The Australian was killed instantly when an Islamic State explosive device blew up

[Demining group] program manager [Name removed] says the unnamed Australian was killed instantly when the bomb containing up to seven kilograms of explosives blew up. He says the family of the victim, described as the supervisor of a team of 30 national deminers, had asked that his name be withheld.

"The deceased has been working in the area for six months already and was a very seasoned explosive and demining expert with several decades of experience in this technical field," the charity said in a statement.

"A full investigation into the cause of the accident has been opened, in cooperation with the national demining authorities and police forces."

[Demining INGO] has removed some 500 homemade bombs in the Daquq area since it began working there around two months ago, Kurdish team member [name removed] said.

The team of two dozen includes both expatriates and Kurdish forces who control the area and who say they do not have the capabilities to deal with the bombs left by Islamic State.

Former Aussie soldier dedicated to disarming buried bombs left in fields of war killed by 7kg bomb <http://www.news.com.au/national/former-aussie-soldier-dedicated-to-disarming-buried-bombs-left-in-fields-of-war-killed-by-7kg-bomb/news-story/10c0a0768f7eed14287212eb2acac6a>

May 19th 2016-05-23

[The Victim], 58, from the Sydney area, was killed at 10am on Tuesday morning, Iraq time, at a village near Kirkuk, 200km north of Baghdad, while trying to defuse a huge 7kg improved explosive device left behind by the Islamic State.

A team leader with the [Demining INGO], [the Victim] was supervising a group of 30 Iraqi nationals clearing an IED-riddled battlefield that until last year had been held by ISIS, before they were repelled by the Kurdish Peshmerger.

[Name removed], deputy director of [Demining INGO], said from Geneva that [the Victim]'s Australian wife and daughter had asked to see the place where he was killed and the organisation would try to facilitate the visit.

## **Analysis**

This accident is classed as a "Handling accident" because the Victim was believed to be engaged in disarming the device. This view is supported by the recovery of one leg which implies that the Victim was kneeling with one leg behind his body. The complete destruction of upper body, head and arms implies that they were very close to and above the device, a position often necessary when disarming. The Bol makes no mention of the excavation tools made available to the Victim so it is not possible to know whether they were in use at the time.

The primary cause of this accident is listed as "Other" because there were no witnesses and the Victim has disarmed similar devices before so it is not at all clear what happened. The investigators believe that the Victim may have been affected by the heat, made an error or

suffered a heart attack so that he fell onto the device. They do not mention the possibility that the device may have been fitted with an unusual initiation system designed to target anyone attempting to disarm it.

The secondary cause is listed as a “Management Control inadequacy” for the following reasons. The IED is not described in the Bol but was described in some press reports (quoting the INGO management) as containing 7kg of High Explosive. The investigators conclude that the Victim may have fallen on it, so indicating that it was a pressure operated device, so effectively an improvised mine. The lack of IMAS compliant area marking in a working area where there are known to be devices that could be initiated by a footfall is a significant Management Control failing. The failure to wear any PPE, while working and while investigating the accident is a further significant Management Control failing. Although it is very unlikely that PPE would have saved the Victim in this case, it is known that improvised devices often fail to detonate as designed (especially when a year or more old), so PPE should be worn as a protection against a partial detonation.

The Quality Assurance visits to the site raised questions about the imposition of adequate working distances (and 100 metres for a 7kg mine may not seem adequate). Apparently people were crowded around the person working when the QA observed. It may have been in response to these criticisms that the Victim was not observed at all while working that day. If not observed, he should have been in constant communication with someone so that he could report anything untoward as it occurred.

The report is considered inadequate because it does not address the above failings and does not include the detail necessary to avoid recurrence.