

# Standard Operating Procedure **Oiled Wildlife Response (OWR) Container**



# **Equipment Description**

The OWR Container is a purpose built, transportable wildlife washing facility. It needs external power and water sources along with a waste storage / disposal option (e.g. drainage fitted with oily water separator or transportable storage such as IBCs). With these conditions in place, the container provides temperature controlled water (softened if required) to the wash stations in an air-conditioned, ventilated, well-lit working space. Wastewater is removed to an external sump pump from where it can be pumped to the chosen waste storage / disposal option.

# **Technical Specification**

Weight: Max Gross - 4500kg Tare - 2185kg Net - 2315kg Width – 8ft Dimensions: Length - 19ft Height – 8ft Power type: 15 Amp power via mains or generator (generator needs to be at least 3.5kVa)

# Health and Safety



To safely operate this equipment 2 people are required. Hard hat required for set up but not required after container is in position or during use Waterproof boots and apron required if working in container during use

Safe Operating Requirements

- Ensure adequate PPE is worn as detailed above,
- All personnel are to be trained in the use or under the close supervision of a trained operator
- If required a Job Safety Analysis (JSA) to be conducted prior to work commencing. Identification of the following safety factors are critical, but not limited to:
  - Manual Handling, 0

Page 1 of 14

Failure to follow Standard Operational Procedures may result in injury to personnel and damage to equipment

SOP 2009 Ref no: Author: RB/PM Date of issue: 11/2014 Reviewer: DJ Date Reviewed 06/21 Approver: NQ



- Slips/Trips/Falls,
- o Vehicle/Vessel Movements,
- Pinch Points
- Spatial Awareness
- o Contamination/Decontamination.

Note: Hearing protection may need to be worn if in close proximity to generator, but inside container under normal working conditions is generally not required.

- Ensure adequate Personal Protective Equipment (PPE) is worn -
  - \* Life jackets must be worn on or near water dependant on operation
- A communication plan must be decided upon to ensure clear and concise communication at all times
- Be aware of pinch points and 'the bight' between the vessel during deployment.
- A full safety brief must be conducted.
- All incidents, accidents and near misses must be reported as per AMOSC company policy.

Note: Ensure electricity cables and water hoses are clearly marked, taped, pinned and / or buried so that they do not cause a tripping hazard.

## **Operational Instructions**

#### OWR Container Set up

- It is preferable for the OWR Container to be transported using a side loader truck as can then be positioned on site with no other lifting gear required.
- Ensure the site for the container is level and on firm ground. Preferably a car park or sealed area. However, at rear of OWR Container a hole may need to be dug for the sump pump so need to account for this when positioning OWR Container. Alternative to hole is to raise OWR Container higher on blocks – for this would need suitable blocks and higher entrance steps.
- When the container is off-loaded from the truck, set the timber blocks up, four on each side of the container. Check that the container is level in all directions before the doors are opened and while the truck is still on site. Wear a hard hat during any crane operations.
- Unlock the container and doors and make sure that the internal doors swing freely and latch correctly.
  If not, there is a problem with the container levelling and should be re-checked.
- Remove rear security panels:
  - Power inlet (to supply power to container lights, air con, pressure pump, water heaters and extraction fan) and power outlet (to supply drainage pump)
  - Air conditioner inlet
  - Air out (extraction fan from plant room)
  - Water Heater exhausts (flue extensions)
  - Cold water in, gas in X2 and hot water outlet
  - Waste water drainage
  - See figures 1a, 1b and 1c below.



switch for the

drainage pump

#### Figure 1a: Rear Security Panels

Removing the security cover from the gas and water connections compartment.

This compartment contains the high pressure automatic changeover valve complete with:

- Bottle connection
  hose and fittings
- Water supply connection and valve
- Hot water outlet connection and valve
- Gas bottle
  restraint chain





## Figure 1b: Further Detail of Rear Security Panels





Figure 1c: All Rear Security Panels Removed



- Connect lead and extension if required from power connection on OWR Container to a generator, a caravan type power outlet or can be wired directly to the mains. If using a generator ensure it is as far away as possible from any wildlife as noise could cause stress to animals.
- Dig hole (approx. 80cm diameter and 50cm depth) at the back of the OWR Container and place sump pump tank into hole. Connect sump pump and place sump pump into tank.
- Connect lay flat hose from sump pump to suitable waste destination (e.g. drainage with oily water separator or temporary waste storage).
- Fit flue extensions for water heaters (never run water heaters without first connecting flue extensions).
- Connect x2 gas bottles\* and turn on primary gas bottle.
- Connect and turn on water at source and on OWR Container.
- Position steps leading up to OWR Container doorway.
- Sorbent roll may be secured around entrance of OWR Container to prevent secondary contamination.
- Cones and high visibility tape should be used to cordon off operational area.



\* Always ensure that two gas bottles are connected at all times. Reason: During exercise Bunker Oil, Phillip Island Nature Parks, May 2016, a potential safety issue was pointed out by Bill Dwyer of DWYERtech in regards to the connecting of gas bottles. The containerised units are designed to operate with two gas bottles connected. With only one gas bottle connected there is the potential for the switch over valve (Figure 1a) to automatically switch between bottles. If only one gas bottle is connected possible leakage of gas can occur from the hose that is not connected to a gas bottle causing a hazard.

### **OWR Container Operation**

Once gas and water are on and generator is running or power on:

- Switch on light switch and plant room power switch on right when first walk in OWR Container.

Figure 2: Position of Light Switch and Plant Room Power Switch



- In plant room on right hand wall are circuit breakers ensure these are all are on.
- Ensure that the pressure pump is plugged in and switched on (on roof of plant room above pressure pump).
- The three switches shown in figure 3 correspond with the three heaters in plant room.

Figure 3: Switches to Turn on Water Heaters





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- If one water heater is supplying more than one wash station the heaters must be set to the same temperature.
- Generally, town water only has enough pressure to run one gas heater, maybe two but never three at once. For normal operation only, the left of the three switches should be turned on to provide water for inside OWR Container. The middle switch is used if the left one fails. The right hand switch is used if water is to be used outside.
- Set valve configuration for required output. For valve configurations dependant on which heaters are being used see figures 4a, 4b, 4c and 4d.
- Note that yellow pipework is gas and green pipework is water and that there is no supporting equipment currently supplied with the OWR Container to utilise water supply to outside.

Figure 4a: Valve Configuration for Using One Water Heater Supplying Water to Three Wash Stations Inside and None Outside



- Water inlet
- Heater 1 gas on, inlet on, outlet on.



Figure 4b: Valve Configuration for Using One Water Heater Supplying Water to Three Wash Stations Inside and One Outside



- Turn on using outside switch
- Water inlet
- Heater 1 gas on, inlet on, outlet on
- Heater 3 gas on, inlet on, outlet on
- Inside block valve to redirect to outside flow on.



Figure 4c: Valve Configuration for Using One Water Heater Supplying Water to Three Wash Stations Inside (Using Second Heater Instead of First) and None Outside



- Heater 2 gas on, inlet on, outlet on.



Figure 4d: Valve Configuration for Using One Water Heater Supplying Water to Three Wash Stations Inside (Using Second Heater Instead of First) and One Outside



- Turn on using outside switch
- Water inlet.
- Heater 2 gas on, inlet on, outlet on
- Heater 3 gas on, inlet on, outlet on 4
- Inside block valve to redirect to outside flow on
- Ensure air conditioning unit is plugged into correct power outlet, see figure 5 below.

Figure 5: Air Conditioning Unit Power



Airconditioning power connection



- Water softener should only be used during an actual incident. See pages 23 to 38 of manufacturers manual for further detail on water softener operation.
- For OWR Container exercise use or maintenance the water softener must be in bypass mode, see figure 6 below.

Figure 6: Water Softener in Bypass Mode



- Set up wash stations underneath each of the three wash hose points inside the OWR Container. There's two on left and one on right. Please note there is a hot water outlet leading to outside where further wash stations could be set up however those stations or support structures are not included with this OWR Container.
- Water to the hoses for each wash station is controlled at the hose isolation valve to each hose. Further fine control is possible through the hand piece control valve.
- Air conditioning can be switched on at any time and controlled via control switch shown in figure 7 below.



## Figure 7: Air Conditioning Unit Control



- Turn on light switches and adjust air conditioning outlets for wash stations as required, see figure 8 below.

Figure 8: Wash Station Light Switches and Air Conditioning Outlets (Also Shows Location of Water Heater Switches, which are Called Gas Califort Controls in Figure)



 Next to OWR Container entrance on left side is the fresh air inlet which can be adjusted as required. See figure 9 below.

Page **12** of **14** 



Figure 9: Fresh Air Inlet (Shown Here Partially Open)



- Wash waste water will drain from wash stations directly onto floor and then will drain to middle of room to sump pump and pumped to either temporary storage or final destination.

## Emergency shutdown

In the event that an emergency shutdown is required, the following measures should be taken:

- Stop operation of all equipment.
- Switch off main power switch which will kill all power.
- Turn off gas and water at rear of OWR Container.
- If safe to do so disconnect OWR Container from power, gas and water source.

#### Post operation

- Close door to plant room. Steam clean inside of container to remove any remnants of oil (leave sump and pump in place so all waste is disposed of in the same way as during operation). Use normal hose if steam cleaner not available. The OWR Container has water resistant fittings installed however don't spray water directly into water heater control panel or light switches or power outlets. Run air conditioning and extraction fan during this process.
- Dismantle wash stations.
- Work through set up and operation steps outlined in this SOP in reverse.
- Before transporting OWR Container, tie up the hoses, lock all components in the Plant Room and tie down all loose objects in the wash room to avoid damage to the OWR Container walls (bungee netting can be used). Refit all security panels.

#### Maintenance

- All maintenance and repairs are to be completed in accordance with the manufacturer manual and AMOSC procedures. All equipment must be left in an operational condition when not in use.
- Clean OWR Container inside and out after deployment.
- Before OWR Container is stored, ensure that inside is dry and spray with WD40.
- Replenish any items as necessary or as identified for improvement of use.
- Report any defects and conduct remedial action.
- At least 3 times a year, run the water heaters, air-conditioning, extract fans, lights and pump to keep them ready for use. Do not setup and run the water softener until it is required for an oil spill event.



# **Additional Information**

- All maintenance and repairs are to be completed in accordance with either the manufacturer or AMOSC procedures.
- All equipment must be left in an operational condition when not in use.
- All defects must be repaired or the equipment is to be "tagged out" for maintenance and repair.

#### **Related Documents**

AMOSC HSSE Plan PN08 - HSSE Policy AMOSC JSA Template Oiled Wildlife Response Plans Further technical specs and detail can be found in the Manufacturers manual including:

- Air conditioner: pages 18 22
- Water softener: pages 23 38
- Water heater: pages 39 45

