



# GoM Region Pest, Animal & Poisonous Plants Management Safe Work Practice (SWP)

## 1.0 Purpose/Scope

This document outlines general procedures for Pest, Animal and Poisonous Plant Management at BP Regional GoM facilities, inclusive of both onshore base facilities, boats and offshore facilities. It does not apply to unmanned platforms, drilling rigs or lift boats under contract to BP. For those contractor managed sites and BP vendors a similar SWP should be in place. The general procedures outlined in this document are referenced from guidance provided by the United States Department of Agriculture (USDA), the United States Environmental Protection Agency (EPA) and industry research groups associated with both organizations.

*OMS 3.4.2 reads as follows: "Assess exposures and risks from identified health hazards, and implement and maintain plant, process, people, and performance risk reduction measures identified as necessary to manage them. Use this as an input to the entity risk register."*

## 2.0 Background

Pest Management generally implies a reduction in number of pests and/or disease vectors (pests that transmit disease), but can also include methods that deny pests physical access to humans and/or property, either through physical barriers (e.g. the use of screens) or through chemical barriers (e.g. the use of residual chemical barriers and bait traps). Pests include, but are not limited to ants, fleas, cockroaches, termites, ticks, rats, mice, wasps and bedbugs. For the purposes of this SWP, Pest Management includes managing animals and poisonous plants.

The most effective and environmentally sensitive, industry-accepted approach method is termed Integrated Pest Management (IPM). IPM takes advantage of all appropriate pest management options and includes a series of pest management evaluations, decisions and controls. In practice, IPM follows a four-tiered approach:

- **Set Action Thresholds:** Before taking any pest control action, identify what areas or pests are of concern (e.g. sighting a single pest does not always mean control is needed). The level at which pests become a threat is critical to guide future pest control decisions.
- **Monitor and Identify Pests:** Target which pests must be controlled and allow less harmful pests to exist at an acceptable level.
- **Prevention:** Use control methods that work first towards preventing the infestation of pests whenever possible (e.g. low brush and debris accumulations and proper housekeeping lessens the number of places in which pests thrive). An effective prevention strategy is the use of closeable plastic or glass containers for food storage.

- **Control:** Once it has been determined that all preventative methods failed and that a hazardous pest exists in the work area at an unacceptable level, control methods such as the use of additional physical barriers and/or pesticides<sup>1</sup> should be employed.

Pesticide use must be appropriate for the target pest, include following manufacturer's instructions, and personnel must have specific pesticide handling training. It is recommended that an approved Pest Control Service Provider be used in such cases. In addition, all pesticides and chemicals used must be pre-approved for their intended use before arriving on any BP facilities as required by the GoM Hazard Communications SWP.

**Note:** Check whether the product is effective against the pest to be managed- if a pest isn't listed on the product label, the pesticide has not been tested on that pest and it may not be effective. Using the wrong pesticide on bedbugs for instance, can make the infestation worse by causing the bed bugs to hide where the pesticide will not reach them.

Questions about approved Pest Control Service Companies, PPE, and pesticide safety etc... should be directed to the GoM Health and Industrial Hygiene Team Lead.

### 3.0 General Requirements

Each facility should evaluate their pest management needs using the IPM four-tiered approach to identify problem pests of concern. The actual prevention and control needs will vary from facility to facility based upon location and the surrounding environment. For example, most offshore platforms will have very little issue with surrounding insects such as silverfish and ants, but may have transported pests such as cockroaches (in delivered food) and rodents (in delivered food, goods and equipment). Additionally, some facilities may only require a one-time control treatment (if the assessment indicates a one-time issue) and others may need quarterly control treatments to maintain a strong barrier to surrounding pests.

The use of phosphide pesticides (aluminum phosphide, magnesium phosphide, zinc phosphide, etc...) is strictly prohibited at BP Operated Gulf of Mexico facilities. At facilities where BP does not operate the facility, but has employees or contractors present, BP will strongly discourage the use of these pesticides.

The following chart provides guidance for choosing the proper prevention and control methods based upon facilities evaluation of its action threshold and identified pests.

<b>Target Pest of Concern</b>	<b>Prevention Techniques</b>	<b>Control Techniques</b>	<b>Example Products</b> <small>® TM</small>
<p>General Pest Population: -e.g. cockroaches, silverfish, crickets, spiders, ants</p>	<p>One time pest sealing: -Flush all weep holes and apply wire mesh across the weep holes -Seal outer doors w/ dense material such as thick nylon bristle at base and in all gaps -Seal exterior pipes leading into buildings -Seal any cracks on exterior surfaces of building</p> <p>Ongoing: - Keep adjacent brush and plants from touching building - Control debris and storage areas (keep up housekeeping)</p>	<p>Protective Residual Spray:</p> <ul style="list-style-type: none"> <li>• Pinpoint spray 3 separate occasions 3 weeks apart initially and then quarterly (or less if adequate)</li> <li>• Spray all cracks, crevices, doors, thresholds, window sills, molding</li> <li>• Power spray exterior of building at perimeter/foundation quarterly</li> </ul> <p>*Do not allow residual to remain outside of cracks etc. when targeting for cockroaches</p>	<p>Suspend Demon Cynoff</p>

<p>Ant Infestation</p>	<p>One time pest sealing:</p> <ul style="list-style-type: none"> <li>- Seal exterior pipes leading into buildings</li> <li>- Seal any cracks exterior surfaces of building</li> </ul>	<p>Bait Traps:</p> <ul style="list-style-type: none"> <li>• Place inside cupboards, closets, window sills, attics, crawl spaces, etc.</li> <li>• Protective Residual Spray</li> <li>• Power spray exterior of building at perimeter/foundation</li> </ul> <p>*Discontinue baits after infestation is in control, but continue exterior quarterly spraying</p>	<p>FluorGuard, Gourmet Ant Baits or a combination of both Maxforce Cynoff Suspend Talsar</p>
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<b>Target Pest of Concern</b>	<b>Prevention Techniques</b>	<b>Control Techniques</b>	<b>Example Products<sup>® TM</sup></b>
Spider Infestation	<p>Ongoing:</p> <ul style="list-style-type: none"> <li>- Keep adjacent brush and plants from touching building</li> <li>- Control debris and storage areas (keep up housekeeping)</li> </ul>	<p>Indoors Protective Residual Spray:</p> <p>Pinpoint spray baseboards, window sills, closets and around plumbing lines</p> <p>Heavy Infestations:</p> <ul style="list-style-type: none"> <li>• Use a contact aerosol</li> <li>• Use power dusting in heavily infested attics and crawl spaces</li> </ul> <p>Outdoors Protective Residual Spray:</p> <p>Power spray exterior of building at perimeter/foundation quarterly</p>	<p>Cynoff WP Demon WP Suspend SC</p> <p>Airdevil or Pyrethrin aerosol</p> <p>Delta Dust</p> <p>Cynoff WP Demon WP Suspend SC</p>
Bed Bugs	<p>When cleaning or changing bedding, look for: Dark spots (excrement), eggs, skins, live bed bugs, or rusty/red stains.</p> <p>When travelling :</p> <ul style="list-style-type: none"> <li>- Look for signs of infestation (Dark spots, eggs, skins, live bed bugs, or rusty/red stains). Lift and look around all possible hiding spots for bed bugs in the hotel room, not just the mattress.</li> <li>- Store luggage on the hotel's luggage rack if there are no signs of bed bugs on it. Pull the luggage rack away from the wall to prevent insects crawling up the wall and getting into your luggage.</li> </ul> <p>Examine your luggage while repacking and once you return home.</p>	<p>For Non-Chemical Treatment:</p> <ul style="list-style-type: none"> <li>• Heat-treat bedding and clothing in the dryer at high temperatures.</li> <li>• Heat larger infested articles and/or areas to at least 113 °F (45 °C) for 1 hour. The higher the temperature, the shorter the time needed to kill bed bugs at all life stages.</li> <li>• Use mattress, box spring, and pillow encasements to trap bed bugs and help detect infestations.</li> </ul> <p>For Chemical treatment:</p> <ul style="list-style-type: none"> <li>• Use a reputable pest management company.</li> </ul>	<p>- Refer to the following link for pesticide choice <a href="http://cfpub.epa.gov/opprpref/bedbug/">http://cfpub.epa.gov/opprpref/bedbug/</a></p>

<b>Target Pest of Concern</b>	<b>Prevention Techniques</b>	<b>Control Techniques</b>	<b>Example Products<sup>®</sup>™</b>
Rodents	One time pest sealing: - Seal any openings larger than ¼ inch to exclude - Openings where utilities enter buildings should be sealed tight with metal or concrete - Doors, windows and screens should fit tightly - Use high quality door sweeps to prevent gnawing entry - Wood piles, trees, etc. should not touch building/roof lines - Maintain sanitation with regard to garbage containment	Physical Traps <ul style="list-style-type: none"> <li>• Glueboards</li> <li>• Rodenticides</li> <li>• Death caused through consumption – do not use where animals that are not pests are at risk</li> <li>• Be sure not to ‘under feed’ the population or move the bait directly after placing</li> </ul> Odor Elimination <ul style="list-style-type: none"> <li>• For use to eliminate odors from rodent waste and corpses</li> </ul>	Maki Bait Blocks  Talon Brand  Bait Blacks  Odor Genie  Epoleon NnZ
Snakes	Ongoing: - Control debris and storage areas (keep up housekeeping)	Snake Repellent: - 10-30 centimeter barrier strip around perimeter (larger the barrier strip, the better)	Snake-A-Way
Poisonous Plants (Poison Ivy, Poison Oak and Poison Sumac)	- Wear long-sleeved shirts and long pants tucked into boots. Wear cloth or leather gloves.  - Apply barrier creams to exposed skin.  - Educate personnel on the identification of poison ivy and oak (clusters of 3 leaflets), and sumac plants (clusters of 7-13 leaflets).  - Educate personnel on signs and symptoms of exposure (itching, redness, burning sensation, swelling, blisters, rash)	After contact with plants and if experiencing an allergic reaction, consult with a medical professional.  The use of rubbing alcohol may remove the oily resin up to 30 minutes after exposure.  Spray foliage, with Glyphosate (Roundup, Kleenup). Never burn poisonous plants!  To kill vines, cut vine 6 inches above ground level. Treat the stump with glyphosate immediately after cutting.	Roundup and  Kleenup

### 3.1 Handling of Animal Carcasses

When collecting dead animals, the risk of infection from WNV, H5N1, or any other pathogen may be eliminated by avoiding contamination of mucous membranes, eyes, and skin by material from the carcass. This can be accomplished by eliminating any direct contact with dead animal via use of the following safety precautions:

- When picking up any dead animal, wear disposable impermeable gloves and place it directly into a plastic bag. Gloves should be changed if torn or otherwise damaged. If gloves are not available, use an inverted double-plastic bag technique for picking up carcasses or use a shovel to scoop the carcass into a plastic bag.
- In situations in which the carcass is in a wet environment or in other situations in which splashing or aerosolization of viral particles is likely to occur during disposal, safety goggles or a full-face shield shall be worn to protect mucous membranes against splashed droplets or particles.
- Carcasses shall be double bagged and placed in a trash receptacle that is secured from access by children and animals.
- If the carcass will be submitted for testing, hold it a cool location until it pickup or delivery to authorities. Carcasses shall not be held in close contact with food (e.g., not in a refrigerator or a cooler used to store food).
- Additional details on packing animal carcasses can be found in section 3.1.2.

#### 3.1.1 Additional Precautions for Personnel Tasked with Collecting Dead Animals

- Minimize any work activities that generate airborne particles (e.g. high-pressure washing).
- If aerosolization is unavoidable, a particulate filter respirator shall be used.
- If using safety glasses, a mask, or a respirator, do not remove until after gloves have been removed and hands have been washed with soap and water (or use an alcohol-based hand gel when soap and water are not available).
- After PPE has been removed, hands should immediately be cleaned again and any personal protective equipment worn (e.g., gloves, mask, or clothing) shall be disinfected or discarded.

#### 3.1.2 Packaging of Carcasses for shipment

The following instructions shall be used to package dead animals that will be shipped or delivered to a laboratory or government agency for testing.

- Place each animal in a plastic bag, close, and seal the bag. Cover zipper bag closure with strapping or duct tape after sealing zipper. Twist non-zipper bags closed, fold over on itself, and secure with package strapping or duct tape.
- Place 1st bag inside a 2nd bag, close and seal. More than one individually bagged animal can be placed in the 2nd bag. This prevents cross-contamination of individual specimens and leaking shipping containers.
- Tag the outside of 2nd bag and number of animals and type, date collected, location, and name of collector. Reminder order: TAG, BAG, BAG, TAG.
- Use a hard-sided cooler in good condition for shipment. Close the drain plug of cooler and tape over

inside.

- Line cooler with a thick 3rd bag (1 mil thickness, such as a trash bag).
- Place absorbent material in the 3rd plastic bag to absorb any liquids that might leak during shipping (e.g. paper towels or cellulose wadding).
- Pack the individually bagged animal(s) that are contained within the 2nd sealed bag into the 3rd bag with enough frozen blue ice packs or similar coolant to keep carcasses cold. Use enough coolant to keep samples chilled if there is a delay in delivery. Dry ice shall not be used as a coolant.
- Seal the 3rd bag with methods described for 1st bag.
- Place the completed specimen history and return shipping label in a Ziploc bag and tape to the inside lid of the cooler (if you want the cooler returned).
- Using packing or duct tape, tape the cooler shut around the lid and at each end using a continuous wrap around the cooler
- Attach the shipping document (air bill) with the DOT information below to the outside of each cooler in a resealable pouch with the address of the carcass' destination
- Mark the cooler with the appropriate information:
- Carcasses of animals that died of unknown causes shall be labeled as:
  - **BIOLOGICAL SUBSTANCE, CATEGORY B and UN 3373.**

#### 4.0 Key Responsibilities

For offshore facilities, the **Operations Installation Manager (OIM) or designated Person in Charge (PIC)** is responsible for ensuring that procedures are in place to adequately respond to the facility's existing pest control issues. This includes conducting an initial evaluation of specific pest control needs of the facility and for providing for the establishment and implementation of the Pest Management Plan.

For onshore facilities, the person in charge of the facility's operations has the responsibility for implementing this SWP.

The **Regional Health and Industrial Hygiene Team Leader** is responsible for providing technical guidance and support (i.e. lead pesticide approval process) concerning this safe work practice. They are also responsible for providing assurance to the Region that this SWP is implemented and operating effectively.

#### 5.0 References

United States Department of Agriculture

Integrated Pest Management (IPM) Initiative

Environmental Protection Agency

Citizen's Guide to Pest Control and Pesticide Safety

Resources for Pest Control Management

Pest Control in the School Environment: Adopting Integrated Pest Management

United States Geological Survey

National Wildlife Health Center Instructions for Collection and Shipment of Avian and Mammalian Carcasses



## 6.0 Revision Log

Revision	Authority	Custodian	Revision Details
07/10/2013	Director, Health and Safety	Health and Industrial Hygiene Team Lead	<ul style="list-style-type: none"> <li>Section 1 - added OMS reference.</li> <li>Section 3 - added the statement that phosphide pesticides are prohibited for use at BP GoM operated facilities.</li> </ul>
08/27/2012	Director, Health and Safety	Health and Industrial Hygiene Team Lead	<ul style="list-style-type: none"> <li>Added animals and poisonous plant management to the practice.</li> <li>Updated SPU to Region.</li> <li>Defined pests with examples.</li> <li>Added general requirements for the use of pesticides.</li> <li>Added bed bug management strategy table.</li> <li>Added poisonous plants management strategy.</li> <li>Added the handling of animal carcasses and associated subsections for packaging and shipping of animal carcasses.</li> <li>Updated GoM Industrial Hygiene Coordinator to Regional Health and Industrial Hygiene Team.</li> <li>Added reference to USGS National Wildlife Health Center Instructions for Collection and Shipping of Avian and Mammalian Carcasses.</li> <li>Updated document authority and custodian.</li> </ul>
01/11/2010	GoM HSSE Director, Curtis Jackson	GoM HSSE SWPs Manager, Dennis Johnson	<ul style="list-style-type: none"> <li>Changed Authority name and Custodian name.</li> </ul>
02/28/06	S.Garner S.Tink C. Jackson R.DeLeonardis	Jack Kogut	<ul style="list-style-type: none"> <li>New chapter of Safe Practices Manual.</li> </ul>