



SOUTH AFRICAN PEST CONTROL ASSOCIATION
SUID-AFRIKAANSE PLAAGBEHEERVERENIGING

SAPCA

STANDARD OPERATING PROCEDURE

SOP Title:	Silo Fumigation J-System	SOP Number:	05
Issued by:	SAPCA	Date Issued:	2019

This Standard Operating Procedure (SOP) provides guidelines for the

S.O.P FUMIGATION OF SILO “J”SYSTEM

SITE/LOCATION:

WORK DESCRIPTION: PREPARE AND FUMIGATE THE SILO'S “J”SYSTEM

BASIC STEPS	SAFETY STEPS	CRITICAL STEPS	STEPS FOLLOWED		
			YES	NO	N/A
1. Authority to operate	<ul style="list-style-type: none"> Received formal training Authority to operate in writing 				
2. Pre-planning	<ul style="list-style-type: none"> Ensure required PPE is available and in good condition. (head protection, face protection, hand protection, ear protection, feet protection, special leg protection and jacket) Check that the flanges and circulation piping is in place and serviceable 	<ul style="list-style-type: none"> Check all piping and flanges are secure and sealed Have people move away from site 			
3. Have job plan approved by plant/environmental manager.	<ul style="list-style-type: none"> Obtain approval. Cubic capacity 	<ul style="list-style-type: none"> Check that measurements are correct Don't only use tonnage check against cubic m³ 			

4. Discuss proposed job steps with the team.	<ul style="list-style-type: none"> • Ensure that all steps are taken. 	<ul style="list-style-type: none"> • Ensure proficient supervision will be available. 			
5. Arrival on site.	<ul style="list-style-type: none"> • Check that all points are covered as per per planning • Remove fire extinguisher and first aid kit. • Off load equipment and place in a safe locality. 	<ul style="list-style-type: none"> • Inspect area to be worked in and make it safe • Establish a safety and fire protection plan 			
6. Ensure work site is clear/warn bystanders	<ul style="list-style-type: none"> • Prepare the harness and lifelines where needed. • Check the circulation fan is operating correctly 	<ul style="list-style-type: none"> • Make sure the system is closed and there is no leakage. • Ensure nothing blocks the escape route and set up fans should ventilation not be adequate. 			
7. Should the silo need to be entered for any reason Brief the person entering the silo and the assistants on the procedure and ensure that they all know their task.	<ul style="list-style-type: none"> • Secure harness on operator • Check safety line and securing points • Place protection on chafing points • Check that there is enough lighting in the silo 	<ul style="list-style-type: none"> • Never attempt to work with haste. Take it easy and ensure all safety checks are in place • Ensure anchor points are secure. • Assistants keep a watchful eye on operator in silo to ensure he is alert and responsive. 			
8. Remove equipment and prepare for fumigation	<ul style="list-style-type: none"> • Ensure all equipment is removed. • Seal up the basement doors and secure the area Place the fumigation DEGESCH plates/ sachets in a carrier bag (use a onion bag with lots of holes) and hang in the top of the silo or tie the sachets through the hole provided and hang them in the top • Place monitoring tubes on the top of the silo and where possible at the bottom 	<ul style="list-style-type: none"> • Remove and check that all equipment is accounted for • Place danger tape and demarcate the area • Place danger signs • Do not place too many sachets in one carrier/ split them to avoid combustion 			

9. Start the fumigation fans	<ul style="list-style-type: none"> • Ensure the system is closed and there are no leaks along the piping or at the flanges where the pipes connect • After 30 min take readings at the top and at the bottom and compare the readings 	<ul style="list-style-type: none"> • Ensure all other possible slides/hatches & outlets are sealed with duct tape and there is no leakage • Take readings after 24 hours to establish your Concentration levels. 			
10. Completion of the task. After said period min 5 days	<ul style="list-style-type: none"> • Commence to secure the area from all persons • Put on gas masks and proceed to the area • Remove the seals and open the hatches and doors • Create a ventilation system using fans • Test for gas concentrations • Ensure area is gas free • Clean and pack equipment. 	<ul style="list-style-type: none"> • Put on gas masks • Clear area from unauthorised persons • Place ventilation fans • Remove the sachets placed in the top of the silos • Ensure all tools, equipment and litter is picked up. • Equipment is clean. 			
11. Leaving the site.	<ul style="list-style-type: none"> • Leave the work site debris free. 	<ul style="list-style-type: none"> • Sign off with management • Dispose of the discarded sachets in an appropriate manner. 			

Remarks:

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OBSERVER SIGNATURE: PERSON OBSERVED SIGNATURE:

OBSERVER NAME PRINT: PERSON OBSERVED NAME PRINT:

DATE OBSERVED: DATE FOLLOW-UP:

OTHER PERSONS INVOLVED

NAME PRINT :

SIGNATURE:

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