

# **PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST** **CIRCULATING AND BOOSTER PUMPS**

SITE AND BLDG #: PA051-19401MECHANIC  
SIGNATURE: SKDATE: 9/18/19LOCATION/RM #: MECH WO# 10770 ASSET # 4998START TIME: 9 10FINISH TIME: 9 20

| CHECK POINT                                       | CHECKPOINT DESCRIPTION  | TASK COMPLETE |    | NOTES/ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION) |
|---|---|---------------|----|--|
|   |   | YES           | NO |  |
| 1   | In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to.  | ✓             |    |  |
| 2   | Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.   | ✓             |    |  |
| 3   | It is generally not a good idea to tamper with pumps using mechanical seals if they are otherwise performing properly. Since mechanical seals can cost as much as the pump, it is usually not cost effective to risk damaging the seal by performing an annual internal inspection of the pump. | ✓             |    |  |
| <b>TO BE PERFORMED AT EACH INSPECTION SERVICE</b> |   |               |    |  |
| 1   | Lubricate pump and motor bearings as per manufacturer's specifications. Bearings require lubrication atleast annually.  | ✓             |    |  |
| 2   | Inspect couplings and check for any pump seal leaks.  | ✓             |    |  |
| 3   | Check motor mounts and vibration pads   | ✓             |    |  |
| 4   | Tighten all pump flanges.   | ✓             |    |  |
| 5   | Visually check pump alignment and coupling  | ✓             |    |  |
| 6   | Inspect electrical connections  | ✓             |    |  |

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.

To be performed by: General Maintenance Worker

Additional Notes:

# **PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST** **CIRCULATING AND BOOSTER PUMPS**

SITE AND BLDG #: PHOS-194014998LOCATION/RM #: MECH WO# 10770 ASSET # 4998MECHANIC  
SIGNATURE: SKDATE: 9/18/19START TIME: 9FINISH TIME: 910

| CHECK POINT                                       | CHECKPOINT DESCRIPTION  | TASK COMPLETE |    | NOTES/ ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION) |
|---|---|---------------|----|---|
|   |   | YES           | NO |   |
| 1   | In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to.  | ✓             |    |   |
| 2   | Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.   | ✓             |    |   |
| 3   | It is generally not a good idea to tamper with pumps using mechanical seals if they are otherwise performing properly. Since mechanical seals can cost as much as the pump, it is usually not cost effective to risk damaging the seal by performing an annual internal inspection of the pump. | ✓             |    |   |
| <b>TO BE PERFORMED AT EACH INSPECTION SERVICE</b> |   |               |    |   |
| 1   | Lubricate pump and motor bearings as per manufacturer's specifications. Bearings require lubrication atleast annually.  | ✓             |    |   |
| 2   | Inspect couplings and check for any pump seal leaks.  | ✓             |    |   |
| 3   | Check motor mounts and vibration pads   | ✓             |    |   |
| 4   | Tighten all pump flanges.   | ✓             |    |   |
| 5   | Visually check pump alignment and coupling  | ✓             |    |   |
| 6   | Inspect electrical connections  | ✓             |    |   |

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.

To be performed by: General Maintenance Worker

Additional Notes:

# **PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST** **CIRCULATING AND BOOSTER PUMPS**

SITE AND BLDG #: PA051-19401MECHANIC  
SIGNATURE: SKDATE: 9/18/19LOCATION/RM #: MECH WO# 10770 ASSET # 4940START TIME: 850FINISH TIME: 9

| CHECK POINT                                       | CHECKPOINT DESCRIPTION  | TASK COMPLETE |    | NOTES/ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION) |
|---|---|---------------|----|--|
|   |   | YES           | NO |  |
| 1   | In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to.  | ✓             |    |  |
| 2   | Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.   | ✓             |    |  |
| 3   | It is generally not a good idea to tamper with pumps using mechanical seals if they are otherwise performing properly. Since mechanical seals can cost as much as the pump, it is usually not cost effective to risk damaging the seal by performing an annual internal inspection of the pump. | ✓             |    |  |
| <b>TO BE PERFORMED AT EACH INSPECTION SERVICE</b> |   |               |    |  |
| 1   | Lubricate pump and motor bearings as per manufacturer's specifications. Bearings require lubrication atleast annually.  | ✓             |    |  |
| 2   | Inspect couplings and check for any pump seal leaks.  | ✓             |    |  |
| 3   | Check motor mounts and vibration pads   | ✓             |    |  |
| 4   | Tighten all pump flanges.   | ✓             |    |  |
| 5   | Visually check pump alignment and coupling  | ✓             |    |  |
| 6   | Inspect electrical connections  | ✓             |    |  |

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.

To be performed by: General Maintenance Worker

Additional Notes:



# PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST CIRCULATING AND BOOSTER PUMPS

SITE AND BLDG #: PA051-19401

MECHANIC  
SIGNATURE: SK

DATE: 9/18/19

LOCATION/RM #: MECH WO# 10770 ASSET # 4937

START TIME: 830

FINISH TIME: 846

| CHECK POINT                                | CHECKPOINT DESCRIPTION  | TASK COMPLETE                       |                          | NOTES/ ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION) |
|--|---|-------------------------------------|--------------------------|---|
|  |   | YES                                 | NO                       |   |
| 1  | In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to.  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |   |
| 2  | Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |   |
| 3  | It is generally not a good idea to tamper with pumps using mechanical seals if they are otherwise performing properly. Since mechanical seals can cost as much as the pump, it is usually not cost effective to risk damaging the seal by performing an annual internal inspection of the pump. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |   |
| TO BE PERFORMED AT EACH INSPECTION SERVICE |   |                                     |                          |   |
| 1  | Lubricate pump and motor bearings as per manufacturer's specifications. Bearings require lubrication atleast annually.  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |   |
| 2  | Inspect couplings and check for any pump seal leaks.  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |   |
| 3  | Check motor mounts and vibration pads   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |   |
| 4  | Tighten all pump flanges.   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |   |
| 5  | Visually check pump alignment and coupling  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |   |
| 6  | Inspect electrical connections  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |   |

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.

To be performed by: General Maintenance Worker

Additional Notes:

INFO WAS SUBMITTED FOR REPAIR  
4/2/19

# **PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST** CIRCULATING AND BOOSTER PUMPS

SITE AND BLDG #: PA051-19401MECHANIC  
SIGNATURE: SKDATE: 9/18/19LOCATION/RM #: MECH WO# 10770 ASSET # 4938START TIME: 840FINISH TIME: 850

| CHECK<br>POINT                                    | CHECKPOINT DESCRIPTION  | TASK COMPLETE |    | NOTES/ ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION) |
|---|---|---------------|----|---|
|   |   | YES           | NO |   |
| 1   | In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to.  | ✓             |    |   |
| 2   | Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.   | ✓             |    |   |
| 3   | It is generally not a good idea to tamper with pumps using mechanical seals if they are otherwise performing properly. Since mechanical seals can cost as much as the pump, it is usually not cost effective to risk damaging the seal by performing an annual internal inspection of the pump. | ✓             |    |   |
| <b>TO BE PERFORMED AT EACH INSPECTION SERVICE</b> |   |               |    |   |
| 1   | Lubricate pump and motor bearings as per manufacturer's specifications. Bearings require lubrication atleast annually.  | ✓             |    |   |
| 2   | Inspect couplings and check for any pump seal leaks.  | ✓             |    |   |
| 3   | Check motor mounts and vibration pads   | ✓             |    |   |
| 4   | Tighten all pump flanges.   | ✓             |    |   |
| 5   | Visually check pump alignment and coupling  | ✓             |    |   |
| 6   | Inspect electrical connections  | ✓             |    |   |

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.

To be performed by: General Maintenance Worker

Additional Notes:

# **PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST** **CIRCULATING AND BOOSTER PUMPS**

SITE AND BLDG #: PA051-19401MECHANIC  
SIGNATURE: SK

DATE:

9/18/19LOCATION/RM #: MECH WO# 10770 ASSET # 4883START TIME: 8 20

FINISH TIME:

8 30

| CHECK POINT                                       | CHECKPOINT DESCRIPTION  | TASK COMPLETE |    | SPECIAL INSTRUCTIONS | NOTES/ ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION) |
|---|---|---------------|----|----------------------|---|
|   |   | YES           | NO |                      |   |
| 1   | In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to.  | ✓             |    |                      |   |
| 2   | Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.   | ✓             |    |                      |   |
| 3   | It is generally not a good idea to tamper with pumps using mechanical seals if they are otherwise performing properly. Since mechanical seals can cost as much as the pump, it is usually not cost effective to risk damaging the seal by performing an annual internal inspection of the pump. | ✓             |    |                      |   |
| <b>TO BE PERFORMED AT EACH INSPECTION SERVICE</b> |   |               |    |                      |   |
| 1   | Lubricate pump and motor bearings as per manufacturer's specifications. Bearings require lubrication atleast annually.  | ✓             |    |                      |   |
| 2   | Inspect couplings and check for any pump seal leaks.  | ✓             |    |                      |   |
| 3   | Check motor mounts and vibration pads   | ✓             |    |                      |   |
| 4   | Tighten all pump flanges.   | ✓             |    |                      |   |
| 5   | Visually check pump alignment and coupling  | ✓             |    |                      |   |
| 6   | Inspect electrical connections  | ✓             |    |                      |   |

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed discription of the deficiency.

To be performed by: General Maintenance Worker

Additional Notes:



# **PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST** **CIRCULATING AND BOOSTER PUMPS**

SITE AND BLDG #: PA051-19401MECHANIC  
SIGNATURE: SKDATE: 9/18/19LOCATION/RM #: MECH WO# 10776 ASSET # 4845START TIME: 8 10FINISH TIME: 8 20

| CHECK POINT                                       | CHECKPOINT DESCRIPTION  | TASK COMPLETE |    | SPECIAL INSTRUCTIONS | NOTES/ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO. PROVIDE EXPLANATION) |
|---|---|---------------|----|----------------------|--|
|   |   | YES           | NO |                      |  |
| 1   | In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to.  | ✓             |    |                      |  |
| 2   | Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.   | ✓             |    |                      |  |
| 3   | It is generally not a good idea to tamper with pumps using mechanical seals if they are otherwise performing properly. Since mechanical seals can cost as much as the pump, it is usually not cost effective to risk damaging the seal by performing an annual internal inspection of the pump. | ✓             |    |                      |  |
| <b>TO BE PERFORMED AT EACH INSPECTION SERVICE</b> |   |               |    |                      |  |
| 1   | Lubricate pump and motor bearings as per manufacturer's specifications. Bearings require lubrication atleast annually.  | ✓             |    |                      |  |
| 2   | Inspect couplings and check for any pump seal leaks.  | ✓             |    |                      |  |
| 3   | Check motor mounts and vibration pads   | ✓             |    |                      |  |
| 4   | Tighten all pump flanges.   | ✓             |    |                      |  |
| 5   | Visually check pump alignment and coupling  | ✓             |    |                      |  |
| 6   | Inspect electrical connections  | ✓             |    |                      |  |

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed discription of the deficiency.

To be performed by: General Maintenance Worker

Additional Notes: