

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2BE205 Equip. Class¹² (19) Vertical Tanks or Heat Exchangers

Equipment Description 2B Residual Heat Removal Heat Exchanger

Location: Bldg. Reactor Floor El. 177 Room, Area Room 174
Enclosure

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A

3. Is the anchorage free of corrosion that is more than mild surface oxidation?
Mild surface corrosion Y N U N/A

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
Matches Dwg. # 340-H-VC-00102, Rev. D Y N U N/A

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

¹² Enter the equipment class name from **Appendix B: Classes of Equipment**.

Equipment ID No. 2BE205 Equip. Class¹² (19) Vertical Tanks or Heat Exchangers

Equipment Description 2B Residual Heat Removal Heat Exchanger

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A

No soft targets

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A

No overheads

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

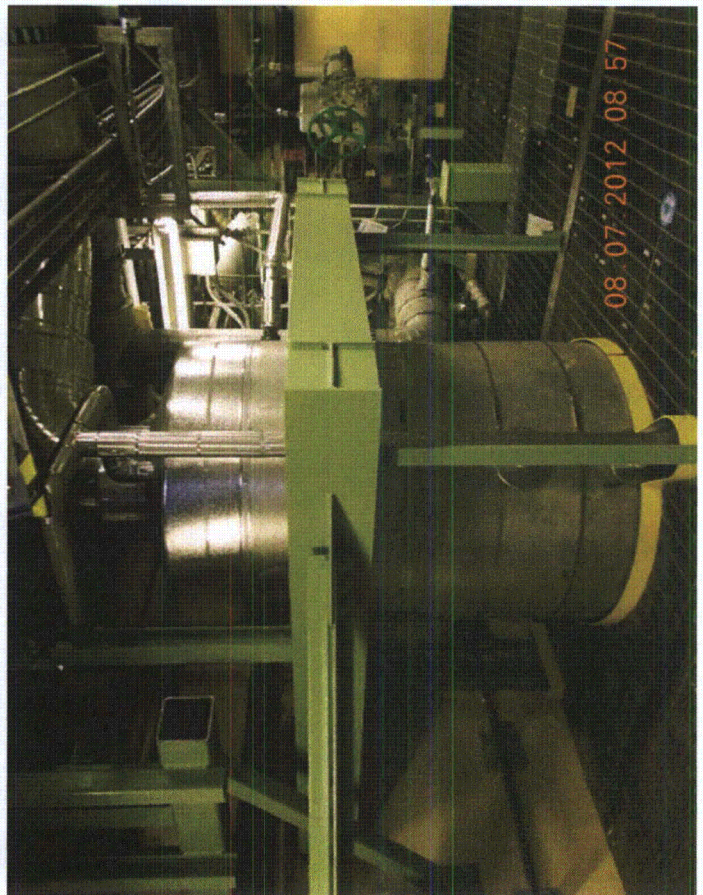
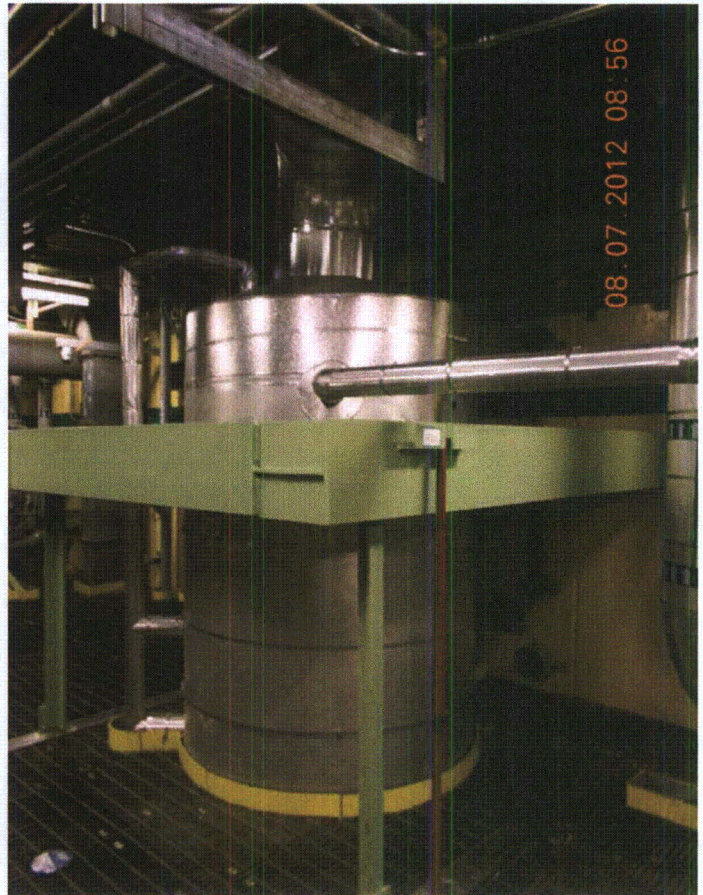
Other Adverse Conditions

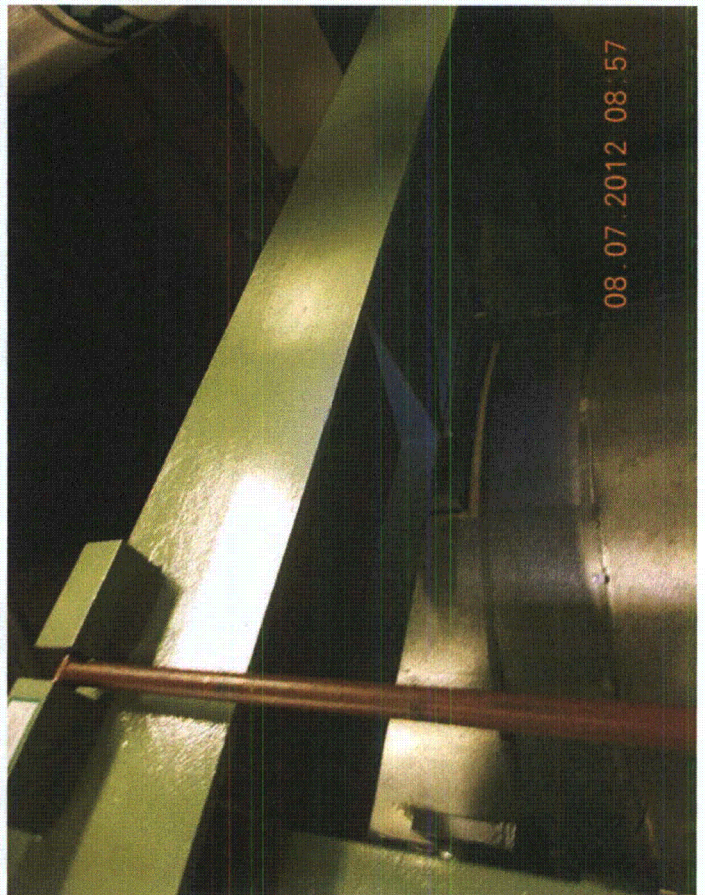
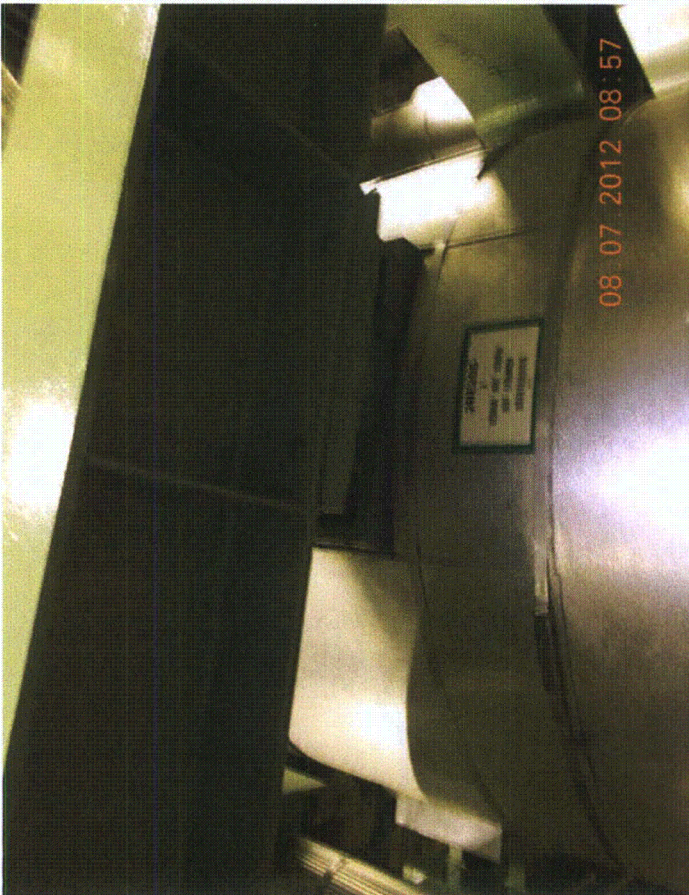
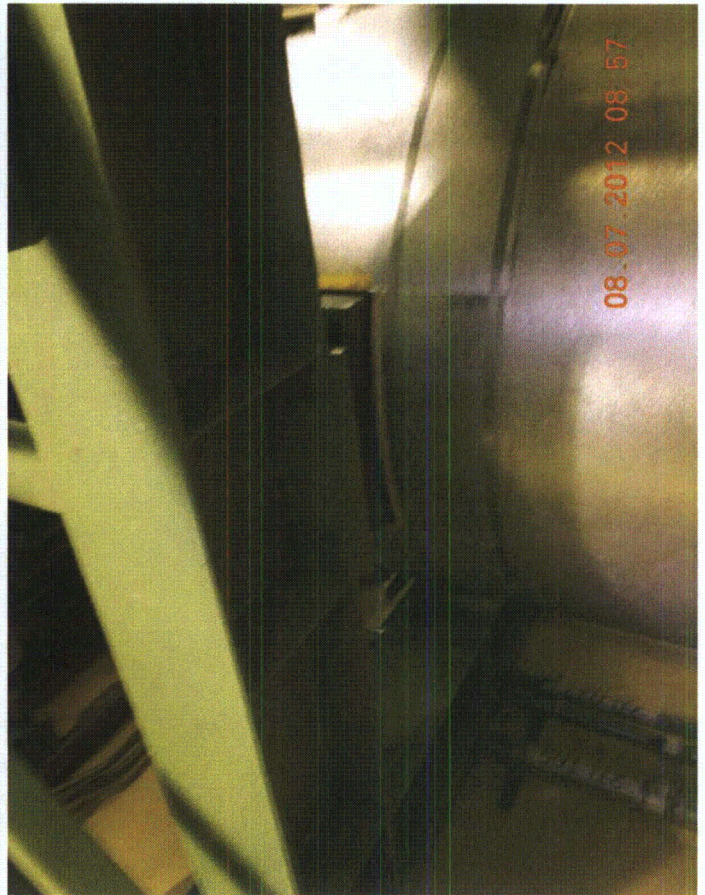
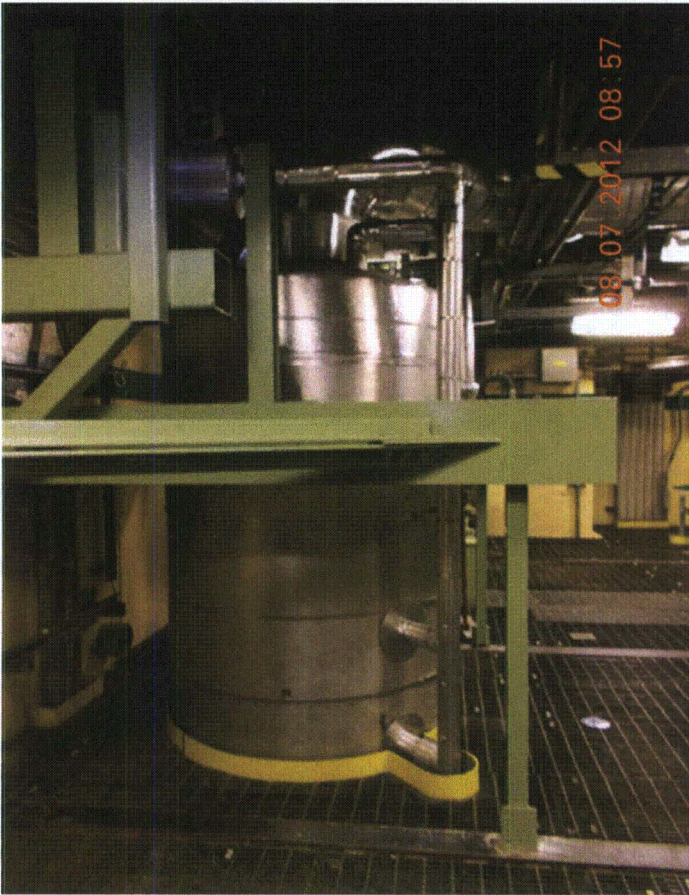
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U

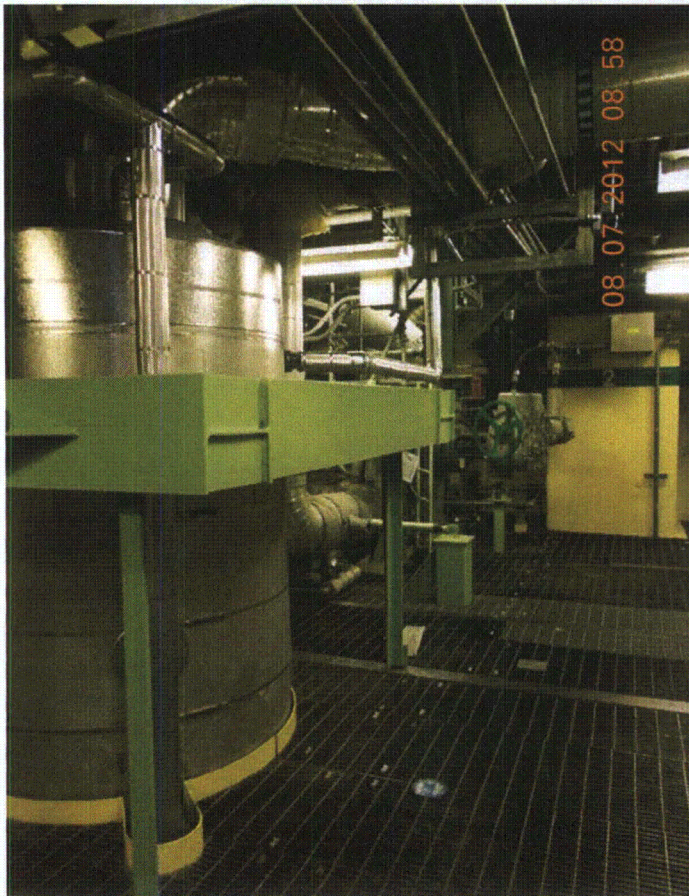
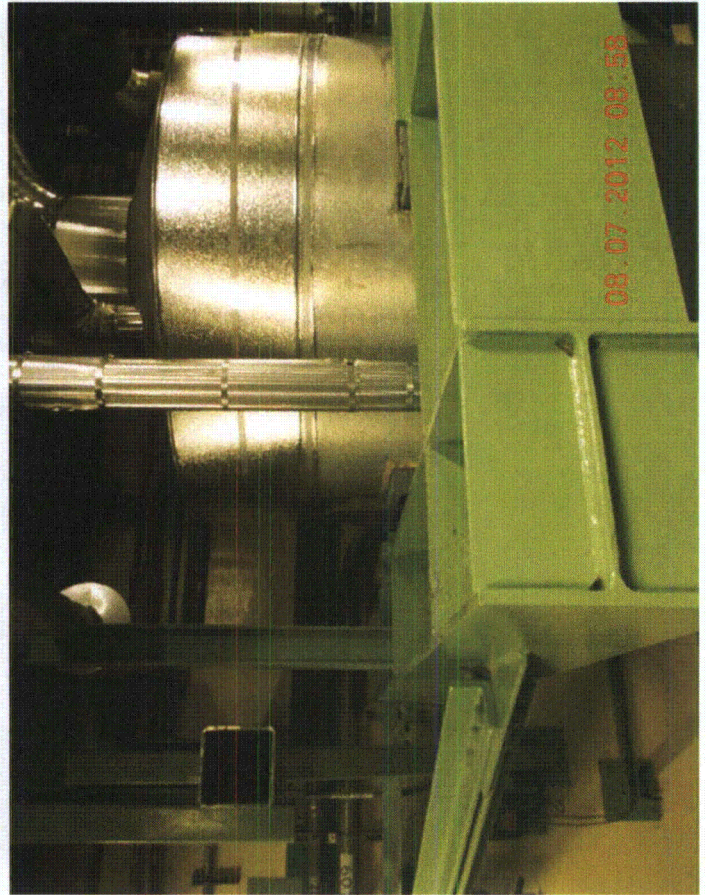
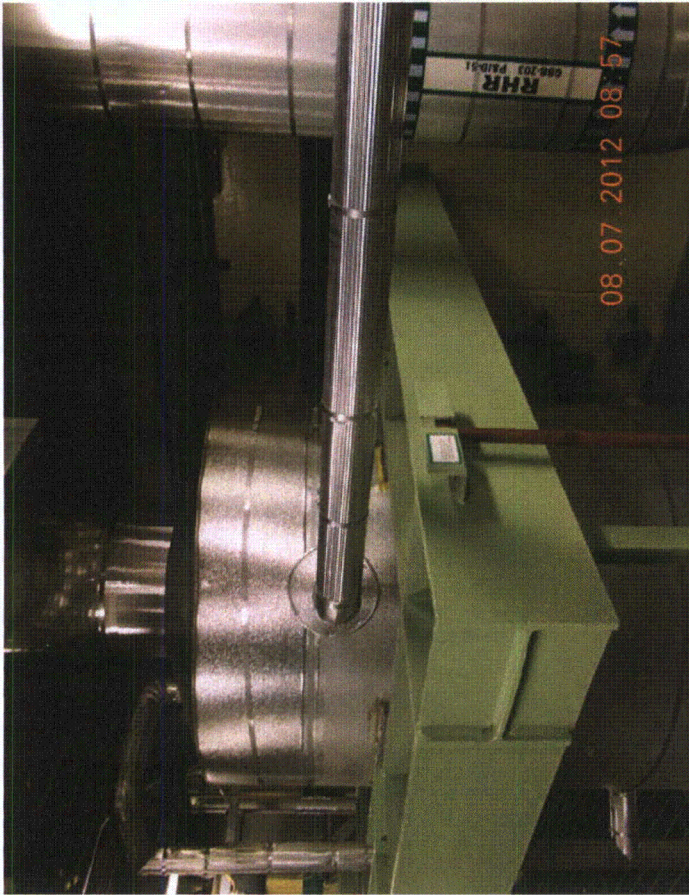
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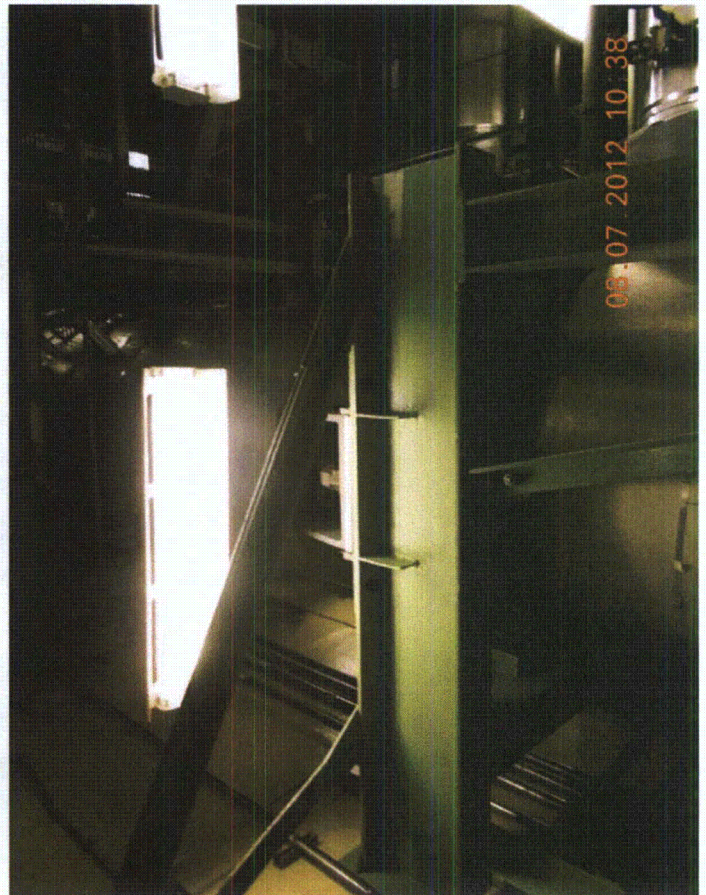
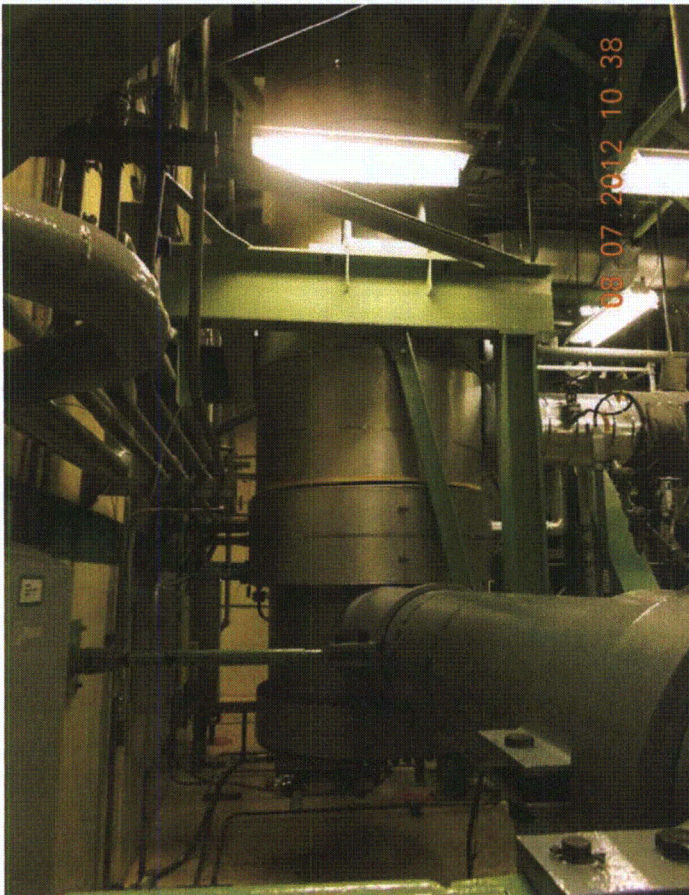
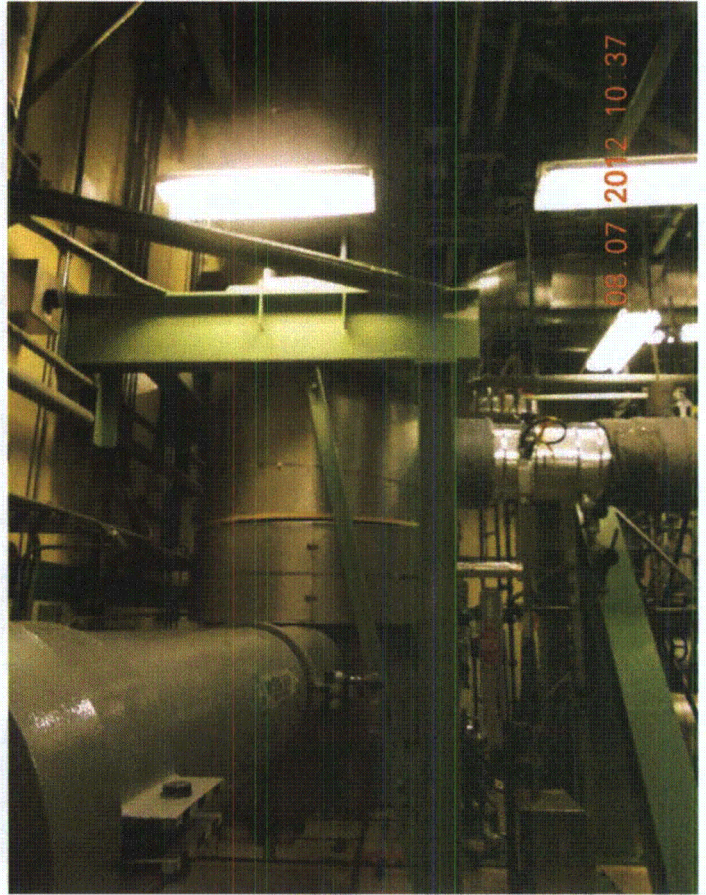
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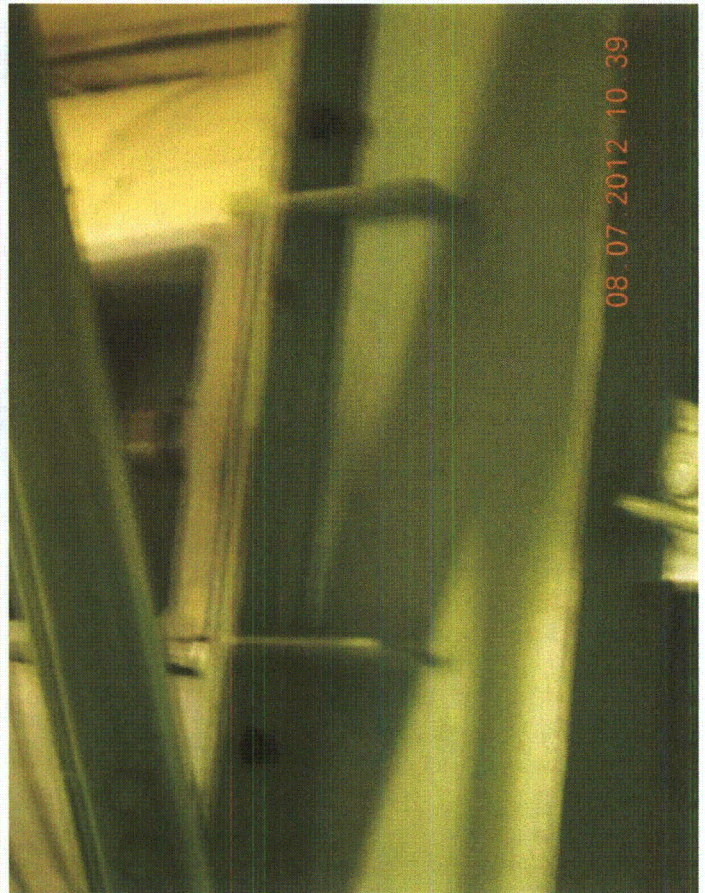
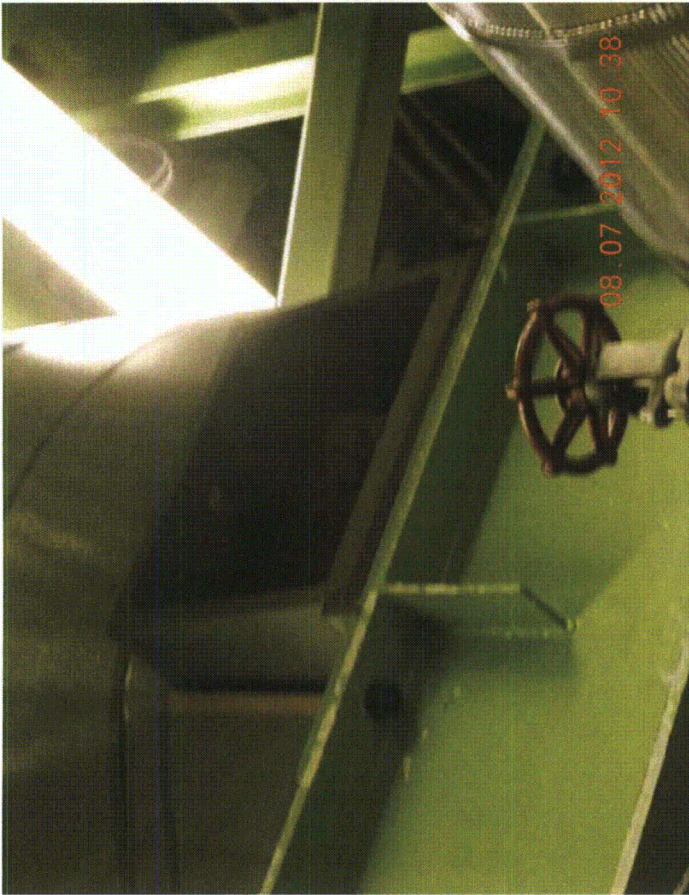
Evaluated by: *James Wiggins* Date: *8/7/2012*
[Signature] *8/7/2012*

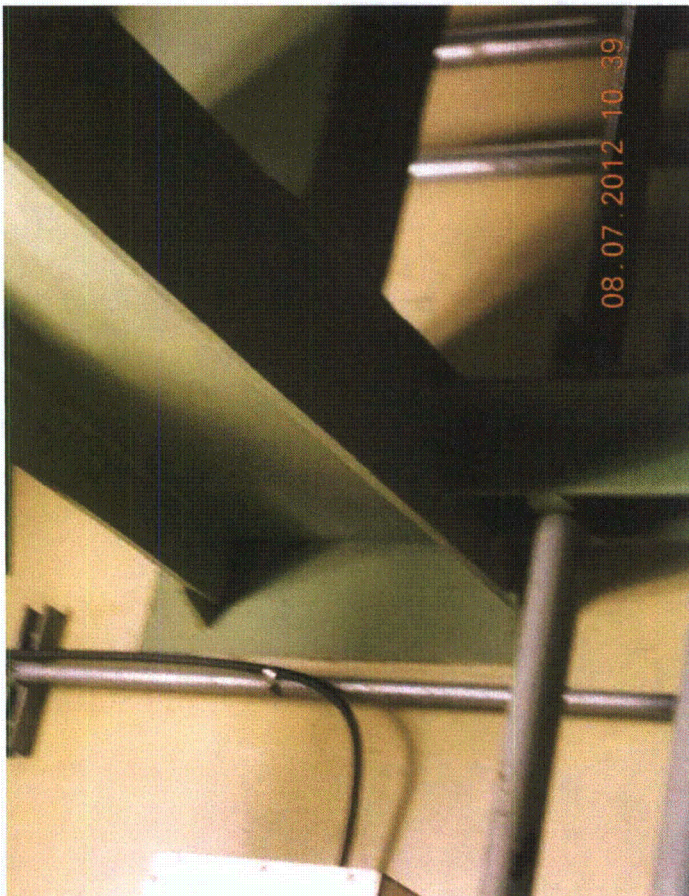
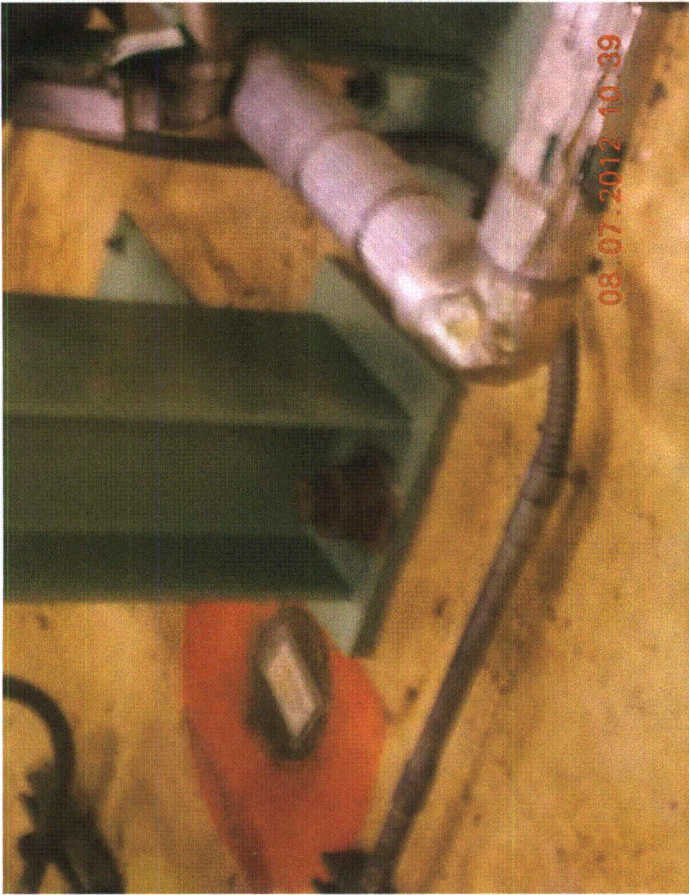












Seismic Walkdown Checklist (SWC)

Equipment ID No. 2BS252A Equip. Class¹² (19) Vertical Tanks or Heat Exchangers

Equipment Description PCIG/ADS Nitrogen Bottles

Location: Bldg. Reactor Enclosure Floor El. 217 Room, Area Room 370E

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A

5. Is the anchorage configuration consistent with plant documentation? Y N U N/A
 (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
Matches Orig. # 8031-C-86A, Sheet 2, Rev. 5

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

¹² Enter the equipment class name from Appendix B: Classes of Equipment.

Equipment ID No. 2BS252-1 Equip. Class¹² (19) Vertical Tanks or Heat Exchangers

Equipment Description PCIG/ADS Nitrogen Bottles

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A

No soft targets

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A

Cable trays adequately supported

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U

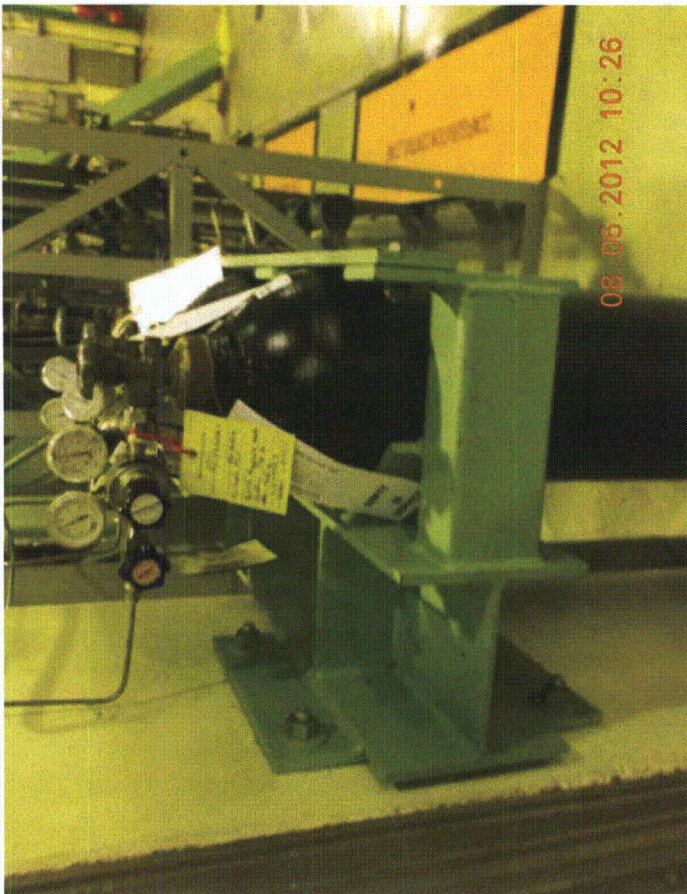
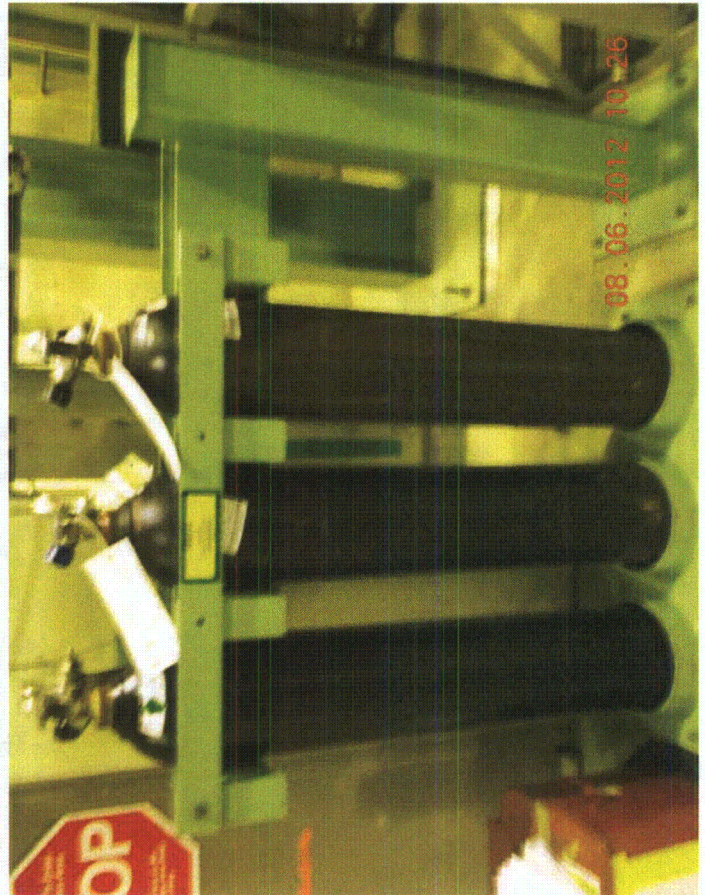
AP storage box staged next to bottle rack is unrestrained; deemed credible but not significant threat to SSCs

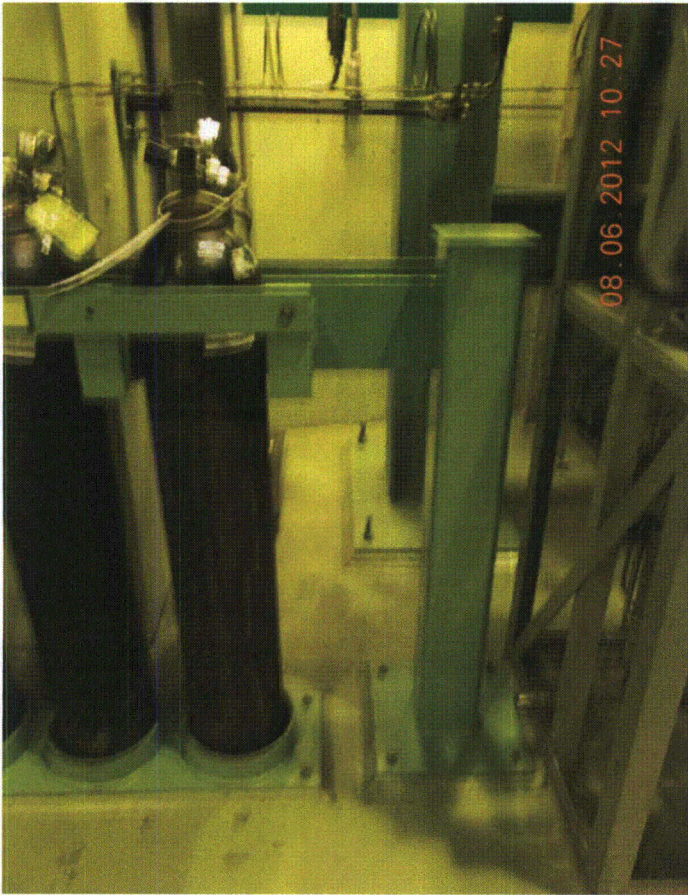
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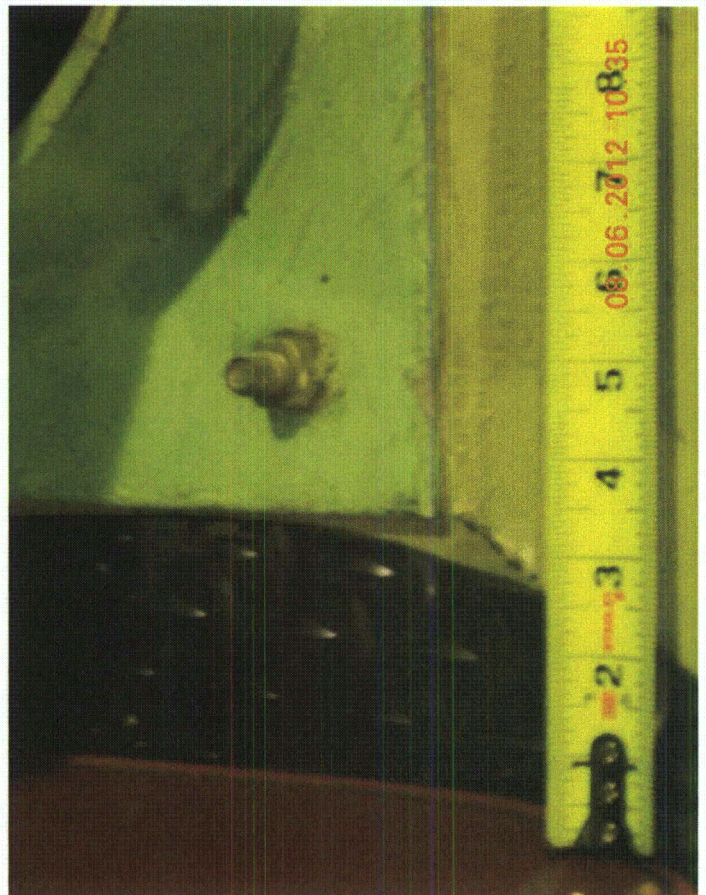
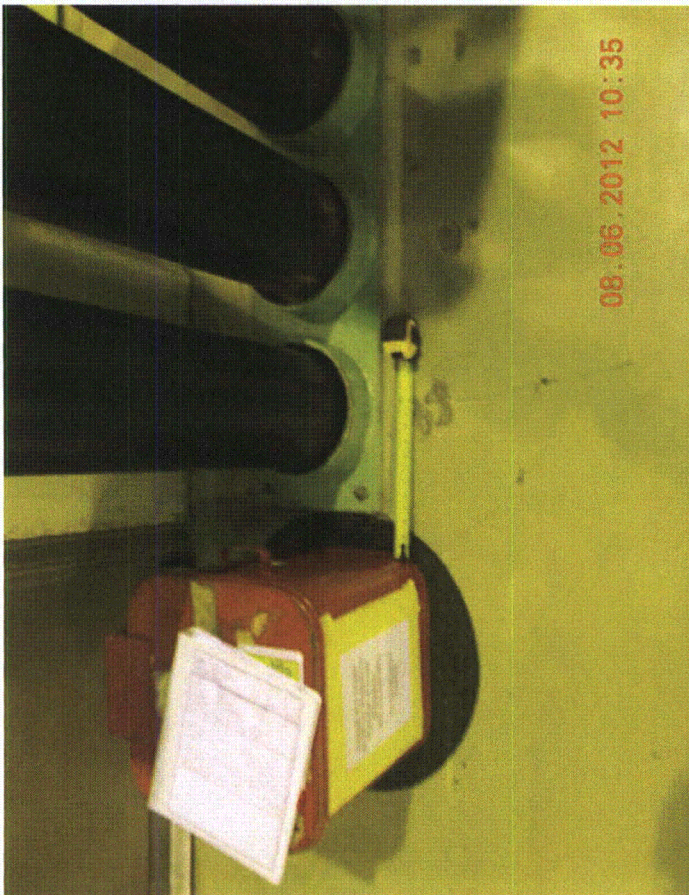
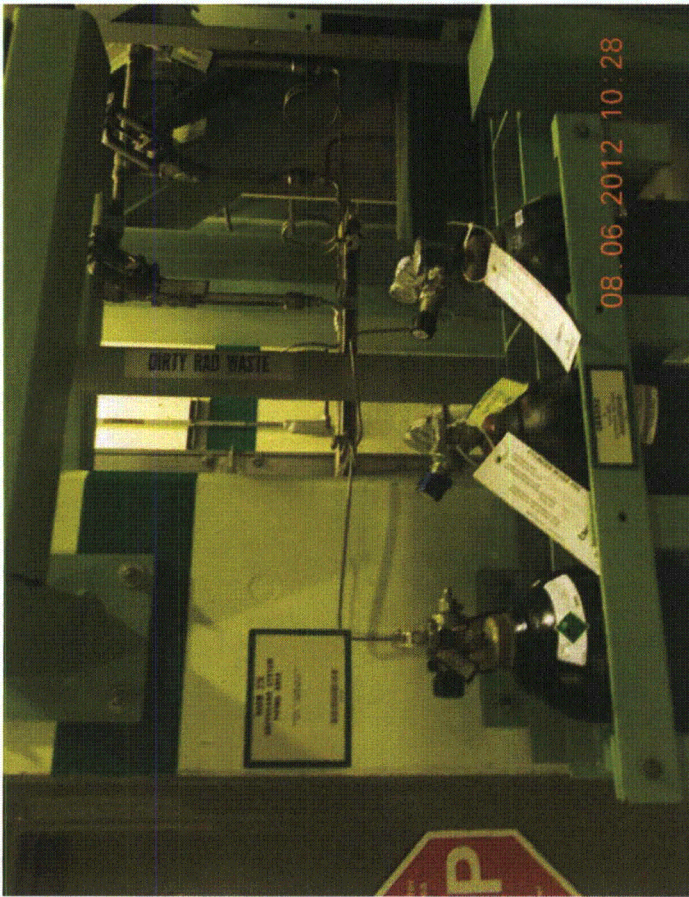
N/A

Evaluated by: *James Wiegman* Date: *8/6/2012*

[Signature] *8/6/2012*









Seismic Walkdown Checklist (SWC)

Equipment ID No. 2BS921 Equip. Class¹² (18) Control Panels & Cabinets

Equipment Description Main Steam Relief Valve Position Transmitter Pre-Amp

Location: Bldg. Reactor Floor El. 253 Room, Area Room 475W
Enclosure

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y N U N/A

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

¹² Enter the equipment class name from **Appendix B: Classes of Equipment**.

Equipment ID No. 2BS921 Equip. Class¹² (18) Control Panels & Cabinets

Equipment Description Main Steam Relief Valve Position Transmitter Pre-Amp

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A

No soft targets

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A

Large bore piping and duct overhead rigidly mounted well supported

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U

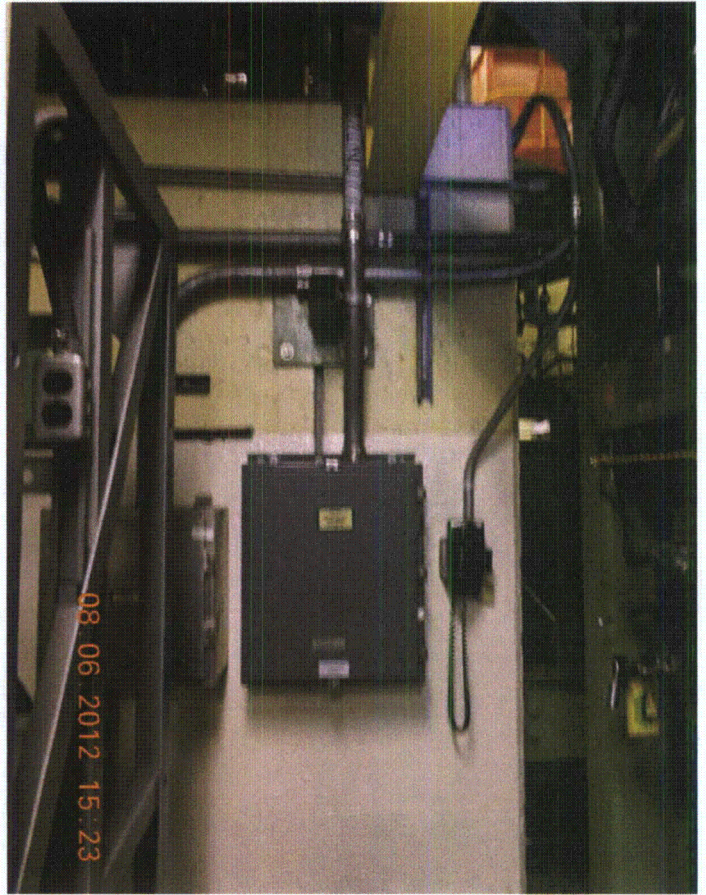
Comments (Additional pages may be added as necessary)

~~Potential FME concern w/ rogue ink pen~~

Evaluated by: *James Wiggins* Date: *8/6/2012*

[Signature] *8/6/2012*





Seismic Walkdown Checklist (SWC)

Equipment ID No. 2BT528 Equip. Class¹² (19) Vertical Tanks or Heat Exchangers

Equipment Description Diesel Generator Day Tank

Location: Bldg. Diesel Generator Building Floor El. 217 Room, Area Room 316A/B

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A

5. Is the anchorage configuration consistent with plant documentation? Y N U N/A
 (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

Verified consistent w/ Drawg. 11873049, Rev. 6BR. MO 9/25/12

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

¹² Enter the equipment class name from Appendix B: Classes of Equipment.

Equipment ID No. 2BT528 Equip. Class¹² (19) Vertical Tanks or Heat Exchangers

Equipment Description Diesel Generator Day Tank

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A

No soft targets identified.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A

Lighting is secure.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

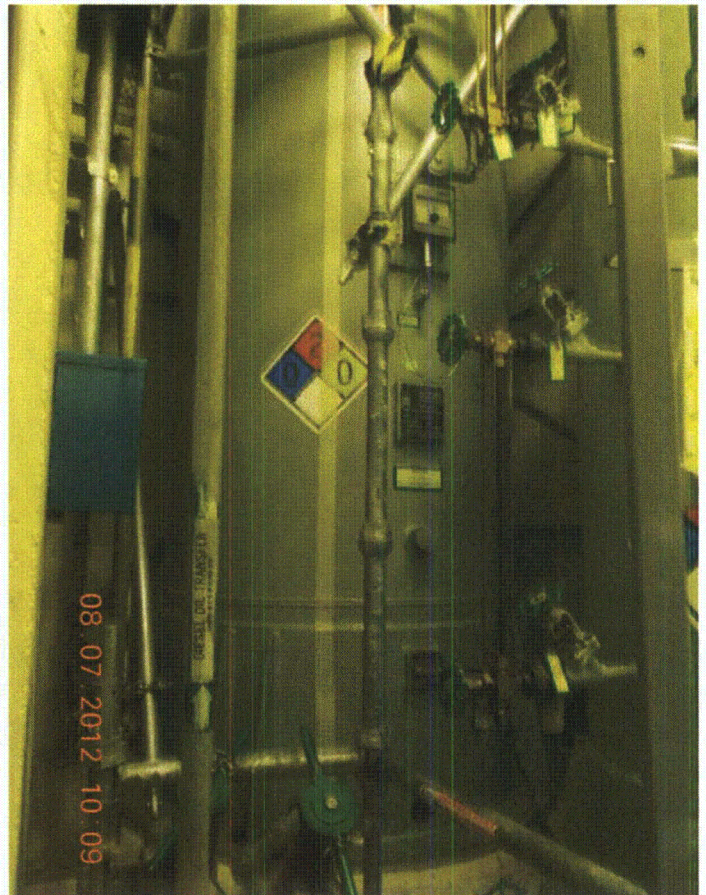
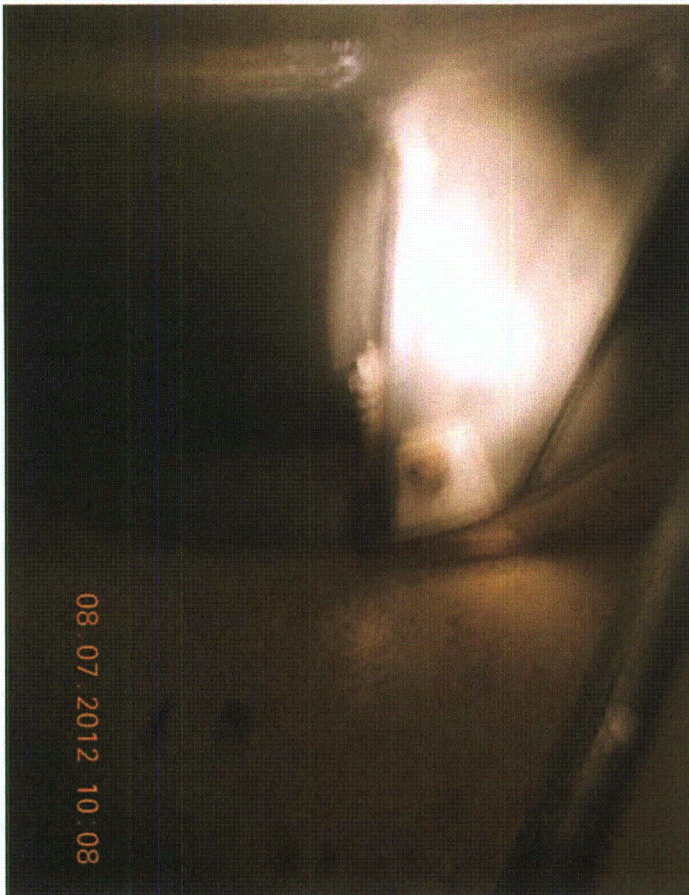
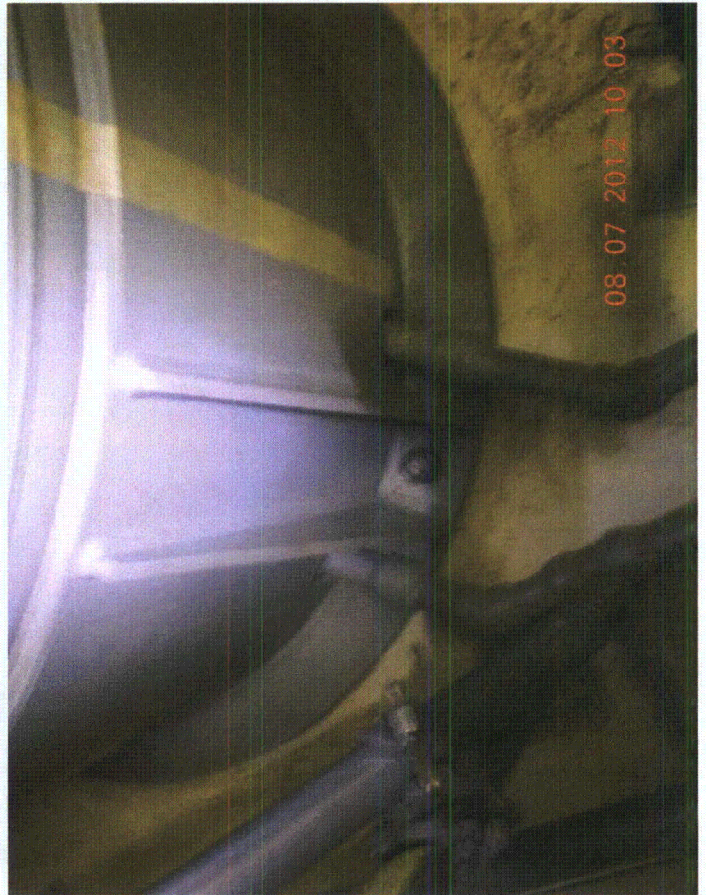
Scarfolding is secure.

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U

Comments (Additional pages may be added as necessary)

Evaluated by: *[Signature]* Date: 8/9/12
H. oghbaei 8/9/12



Seismic Walkdown Checklist (SWC)

Equipment ID No. 2BV208 Equip. Class¹² (08) Fans & Air Handlers

Equipment Description RCIC Pump & Turbine Room Cooler

Location: Bldg. Reactor Floor El. 177 Room, Area Room 179
Enclosure

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N U

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A

4. Is the anchorage free of visible cracks in the concrete near the anchors?
Mounted to structural steel; steel anchored to crack-free concrete Y N U N/A

5. Is the anchorage configuration consistent with plant documentation?
 (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
Matches Dwg. # 8031-M-123-4-(1)-1, Rev. 19BR Y N U N/A

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

¹² Enter the equipment class name from Appendix B: Classes of Equipment.

Equipment ID No. 2BV208 Equip. Class¹² (08) Fans & Air Handlers

Equipment Description RCIC Pump & Turbine Room Cooler

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A

No soft targets

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A

No overheads

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Other Adverse Conditions

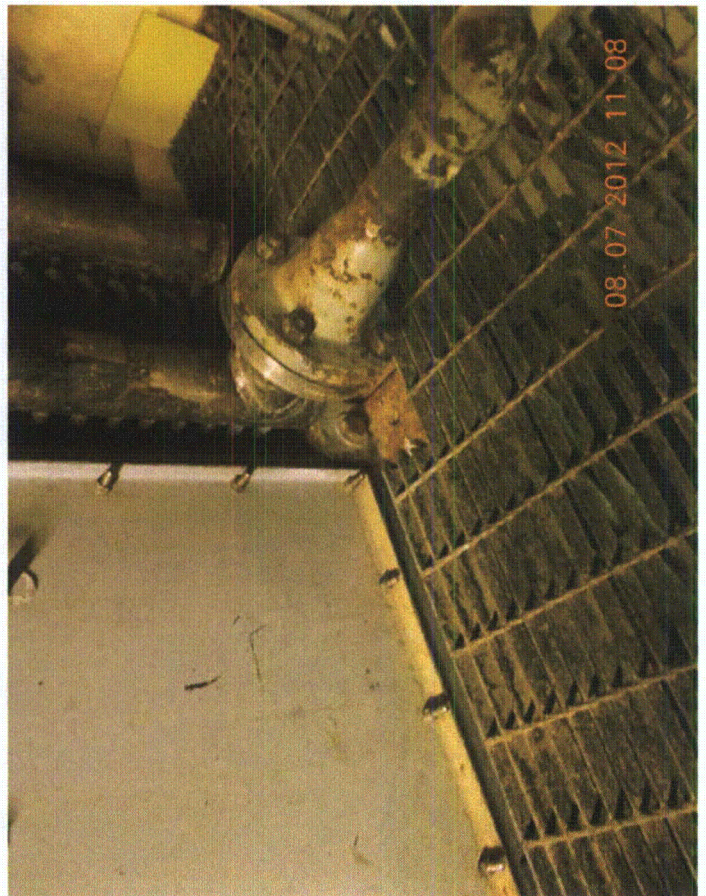
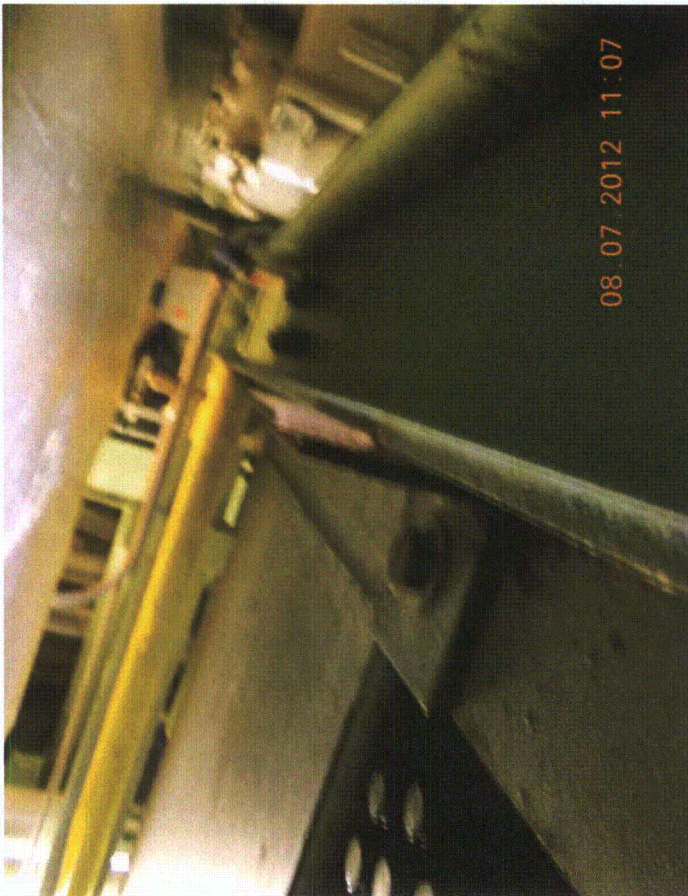
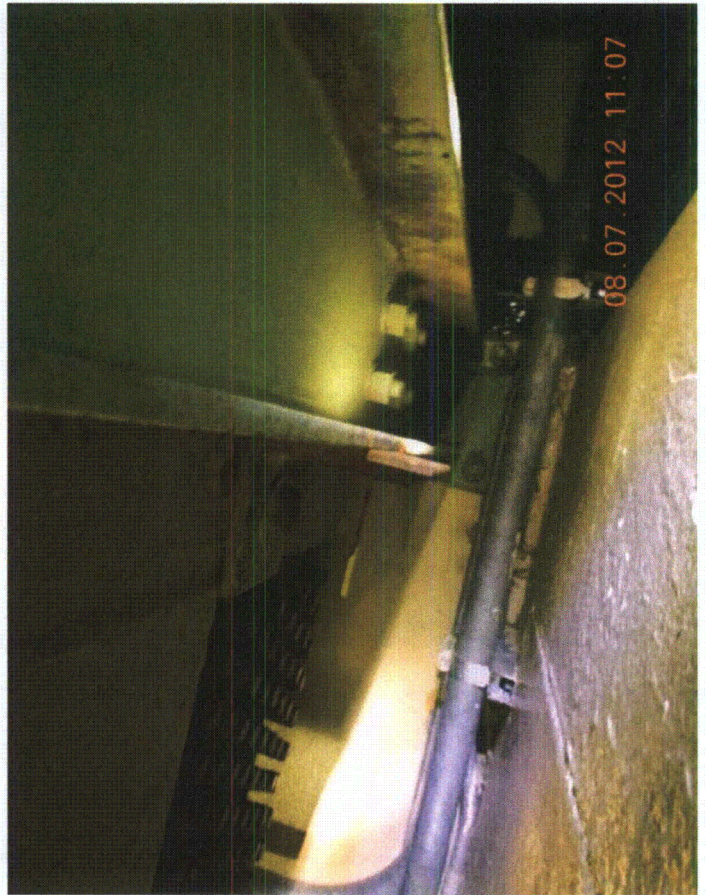
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U

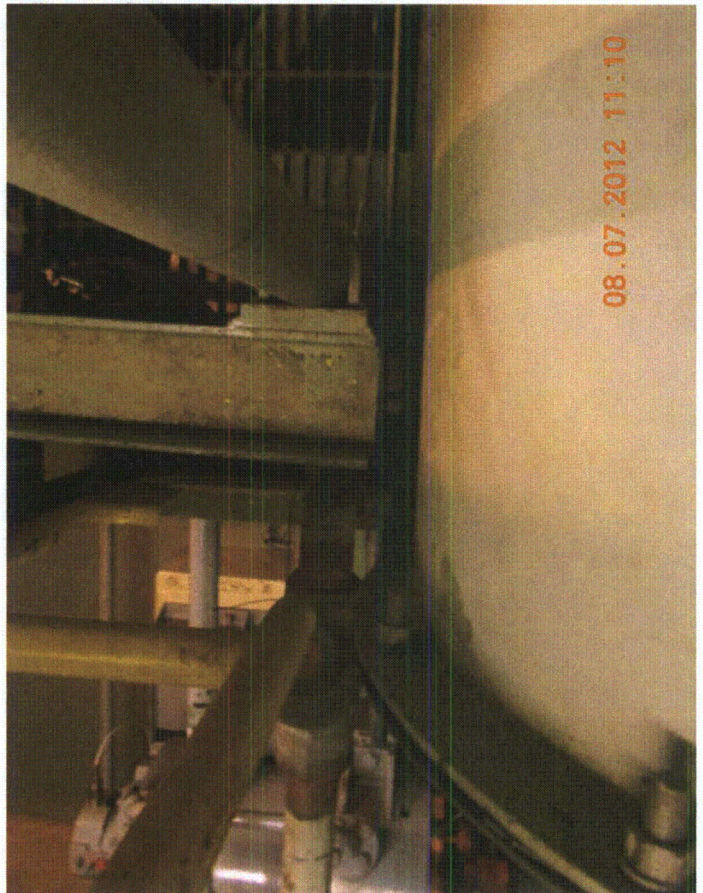
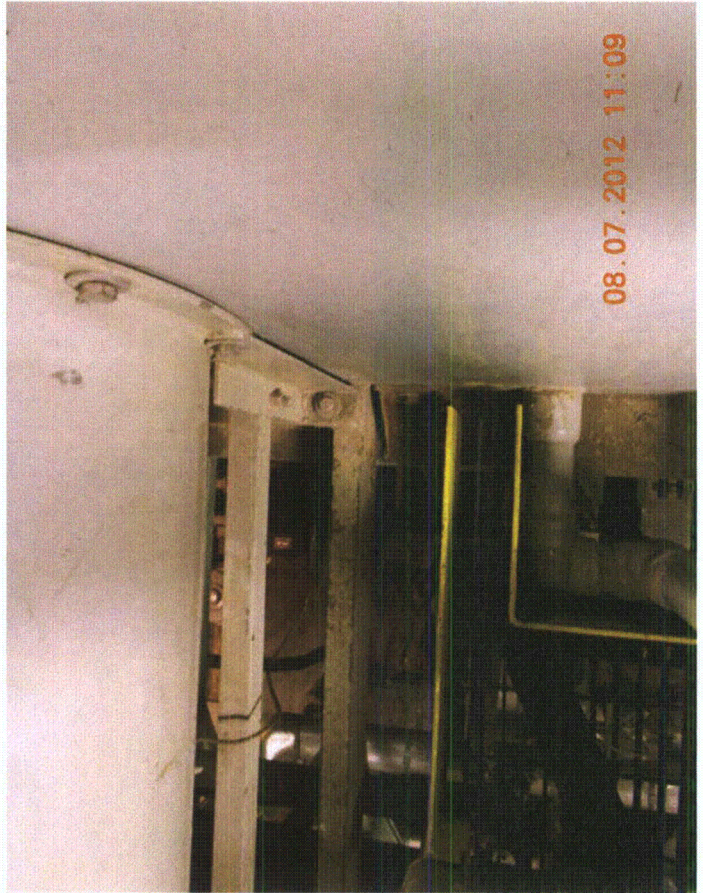
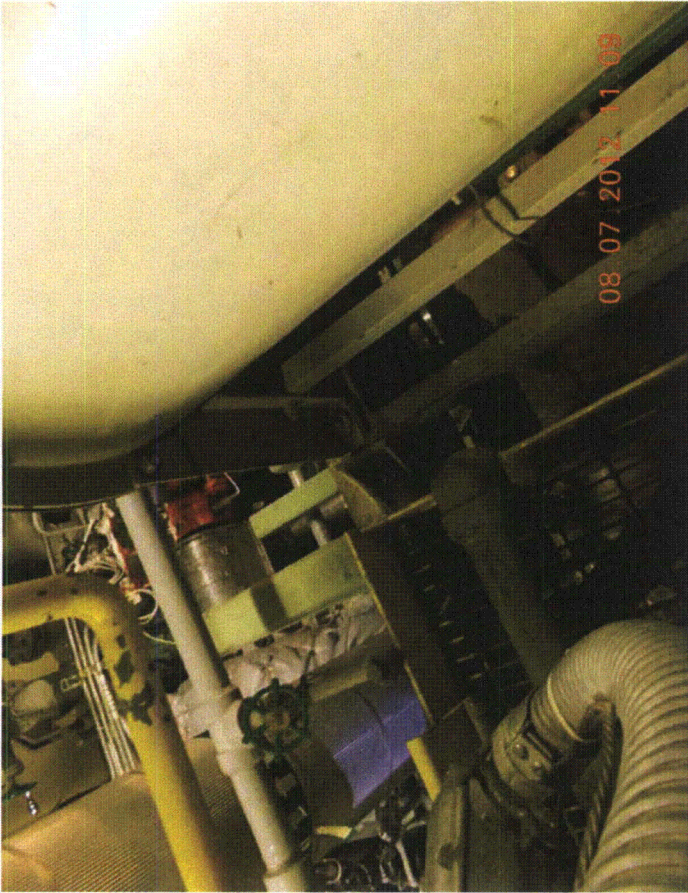
Comments (Additional pages may be added as necessary)

N/A

Evaluated by: *James Wiggins* Date: *8/7/2012*

[Signature] *8/7/2012*





Seismic Walkdown Checklist (SWC)

Equipment ID No. 2BV209
~~2AV208~~ Equip. Class¹² (08) Fans & Air Handlers

Equipment Description HPCI
~~REC Pump & Turbine Room Cooler~~

Location: Bldg. Reactor Floor El. 177 Room, Area Room-179-180
Enclosure

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N U

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A

5. Is the anchorage configuration consistent with plant documentation?
 (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y N U N/A
Matches Orig. # 8031-M-123-4-(1)-1, Rev. 14BR

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

¹² Enter the equipment class name from **Appendix B: Classes of Equipment**.

Equipment ID No. ~~2AV208~~ 2BV209 Equip. Class¹² (08) Fans & Air Handlers
Equipment Description HPCI
~~REC Pump & Turbine Room Cooler~~

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A

No soft targets

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A

No overheads

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

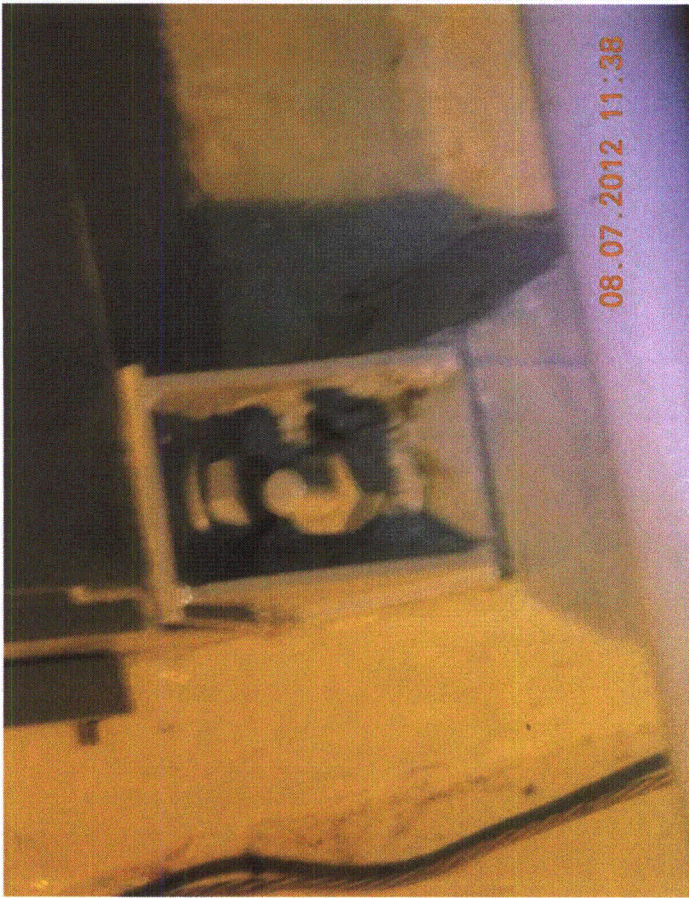
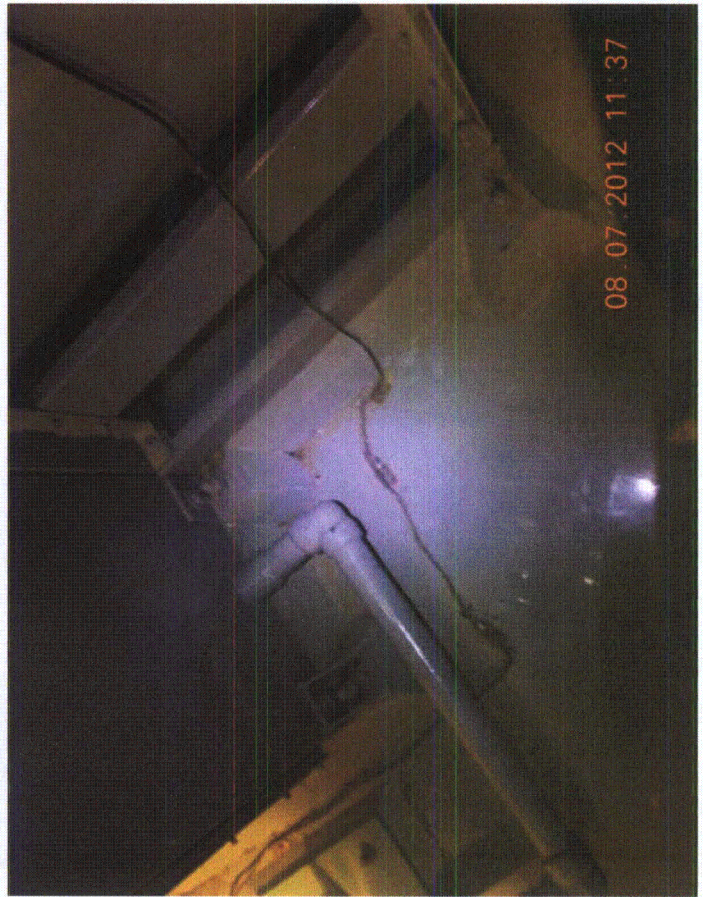
Other Adverse Conditions

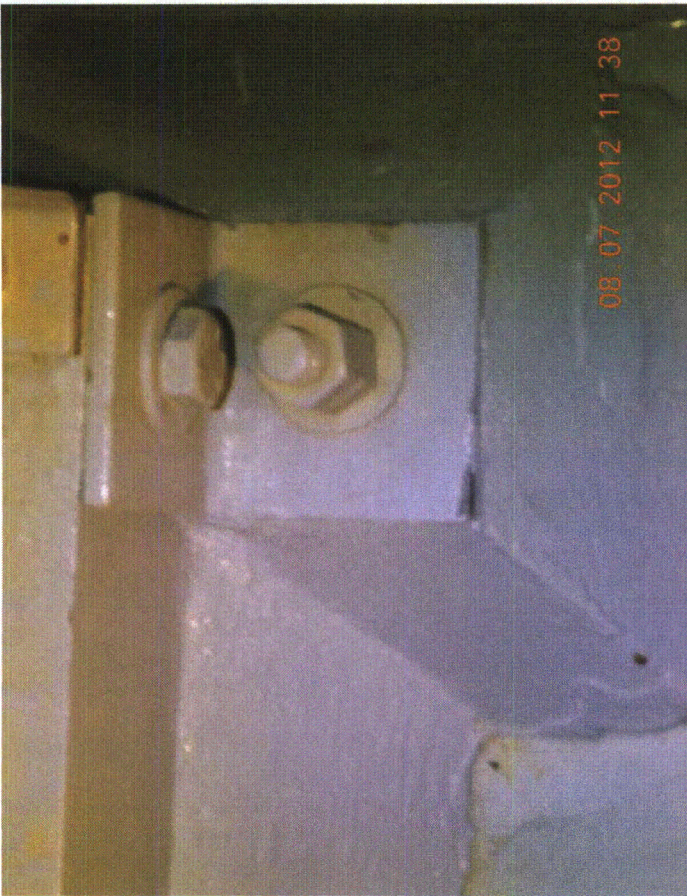
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U

Comments (Additional pages may be added as necessary)

N/A

Evaluated by: *James Wiggins* Date: *8/7/2012*
[Signature] *8/7/2012*

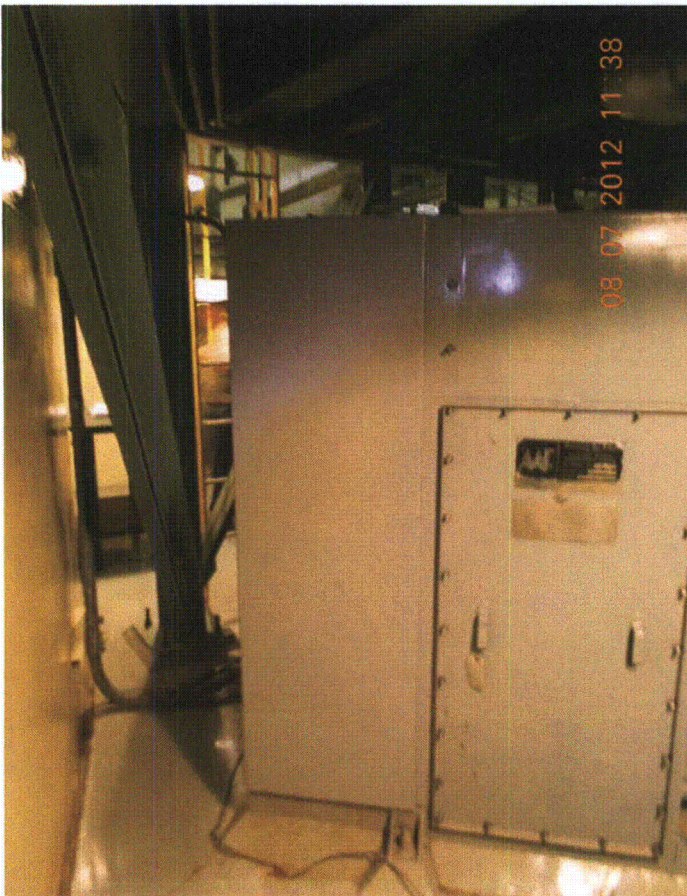




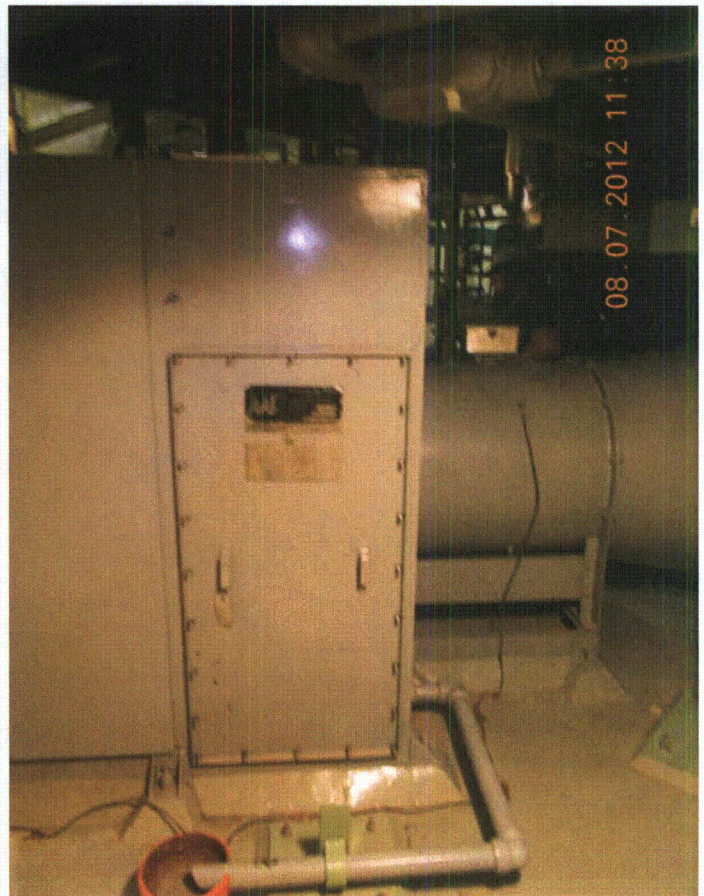
08.07.2012 11:38



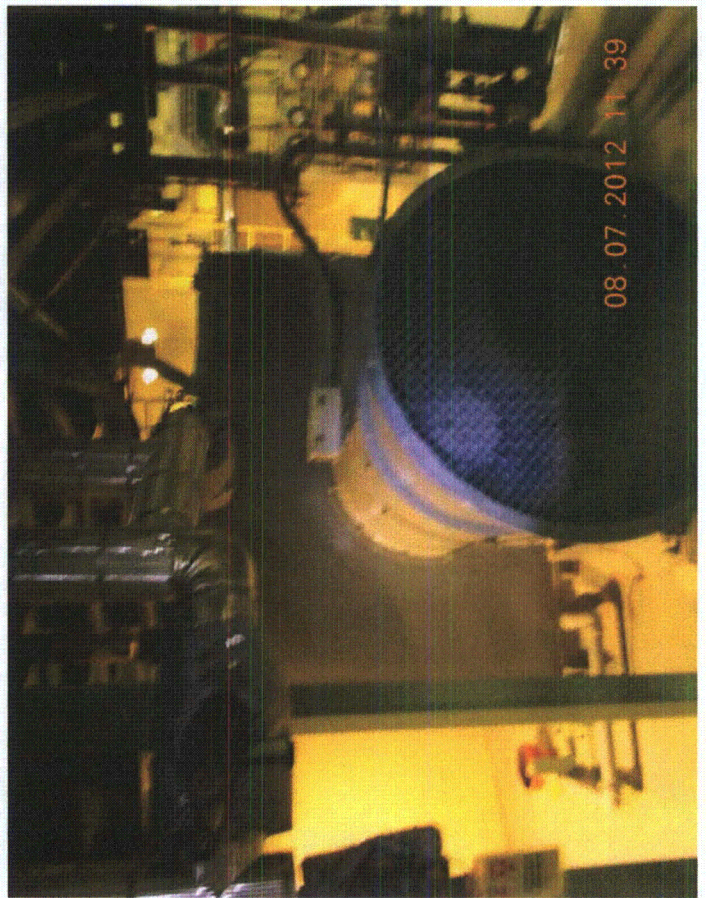
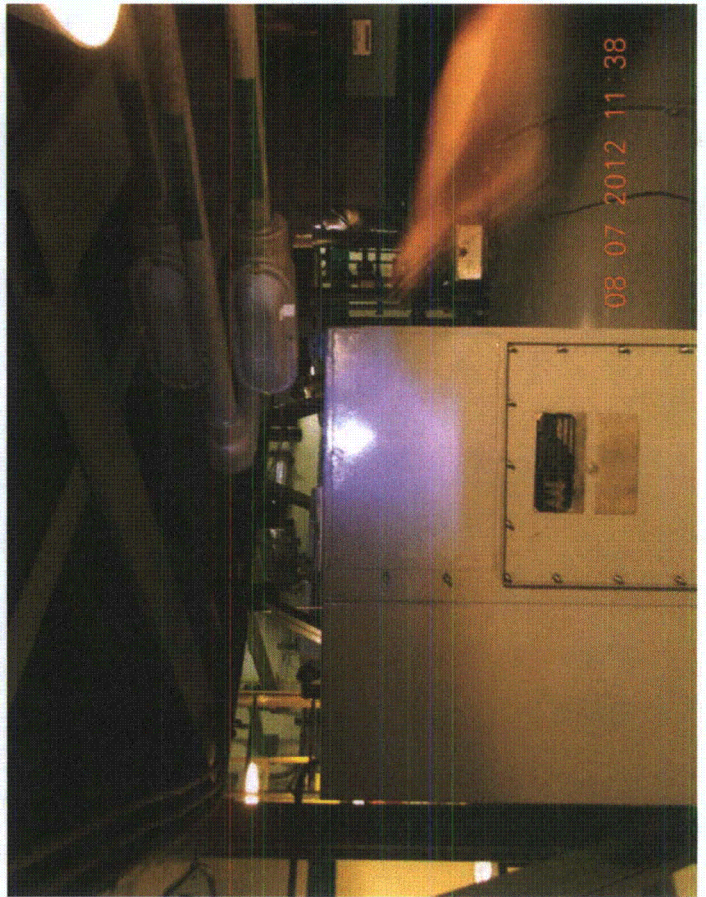
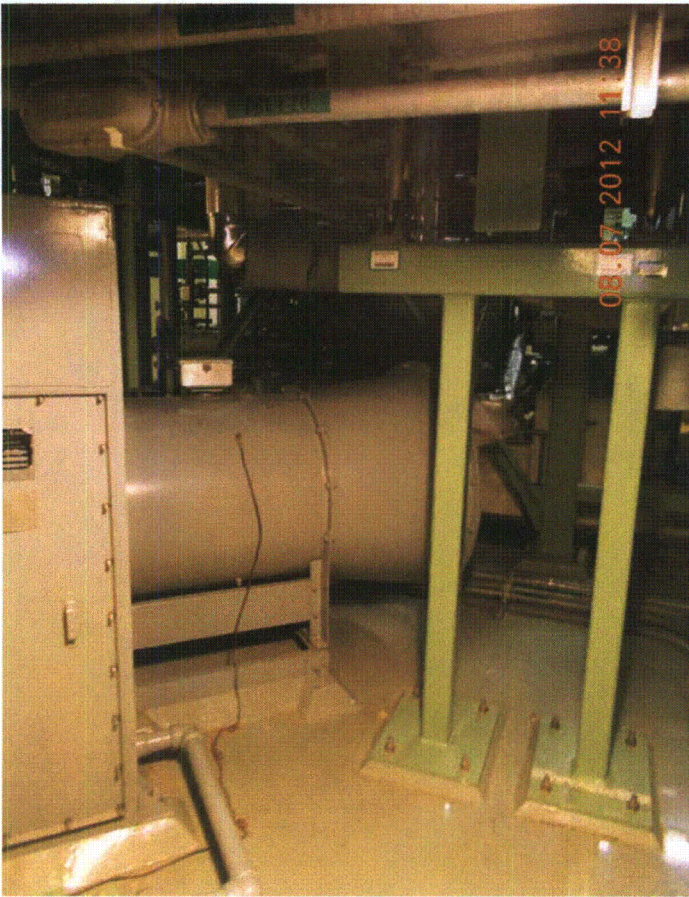
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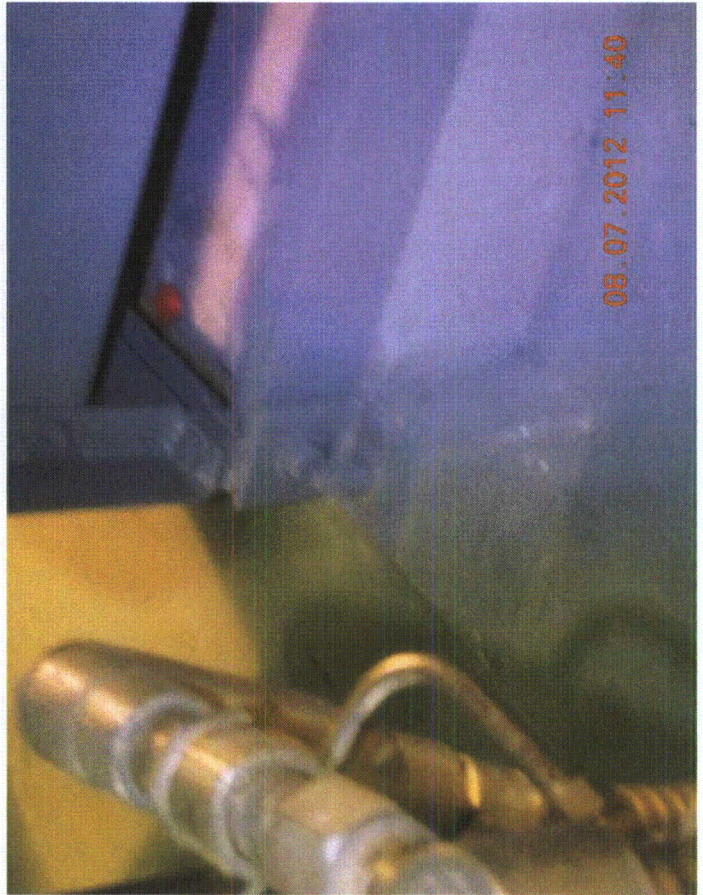
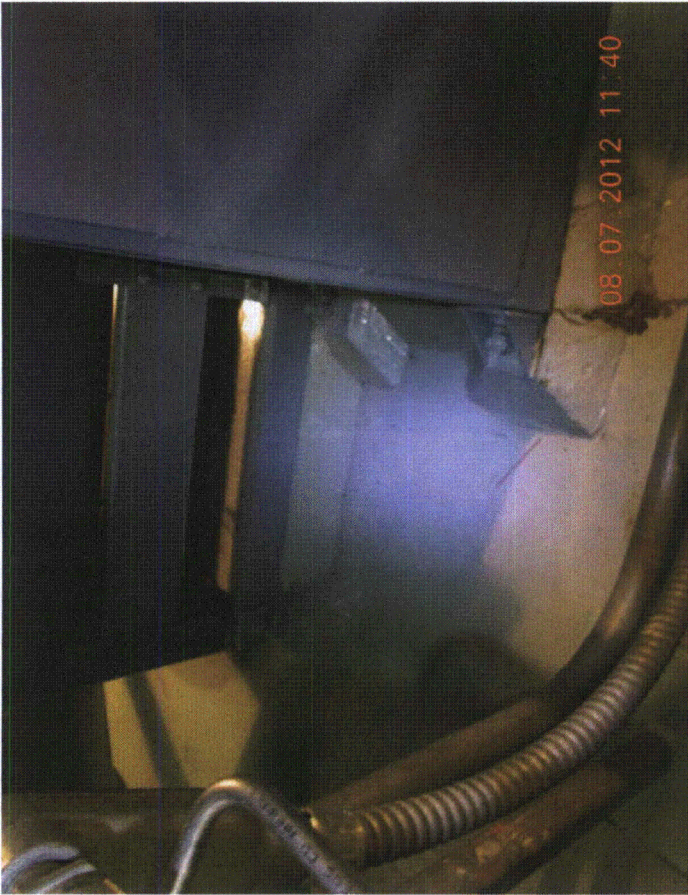


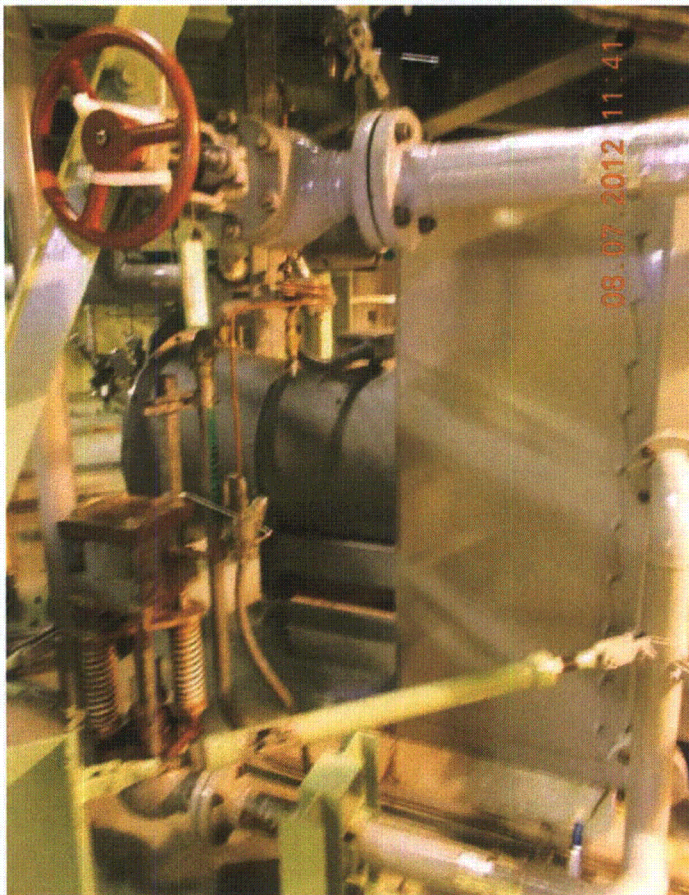
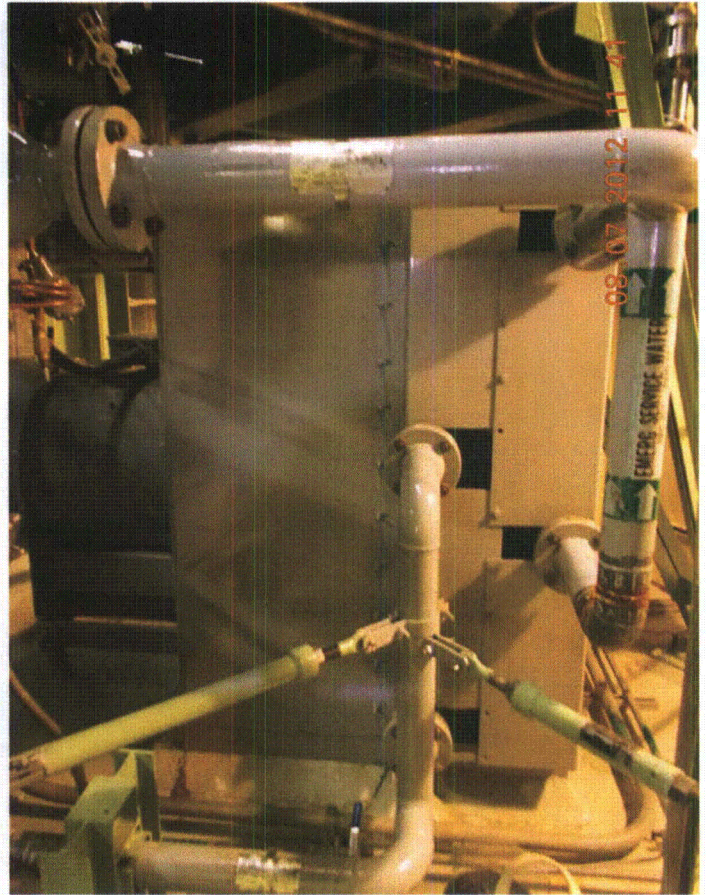
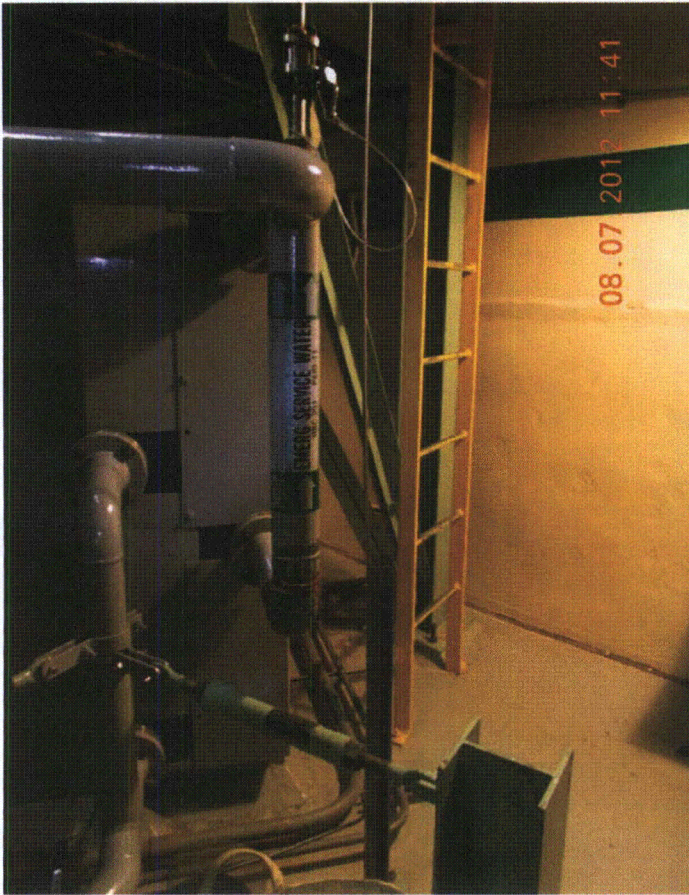
08.07.2012 11:38



08.07.2012 11:38







Seismic Walkdown Checklist (SWC)

Equipment ID No. 2CD101 Equip. Class¹² (13) Batteries & Racks

Equipment Description 125 VDC Battery

Location: Bldg. Control Structure Floor El. 217 Room, Area Room 361

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N U

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
Anchorage is in good condition.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A

5. Is the anchorage configuration consistent with plant documentation? Y N U N/A
 (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
Verified consistent Dwg. M-8052, Rev. 6 BR. MO 9/25/12

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

¹² Enter the equipment class name from Appendix B: Classes of Equipment.

Equipment ID No. 2CD101 Equip. Class¹² (13) Batteries & Racks

Equipment Description 125 VDC Battery

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
No credible II/I issues identified

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
Overhead lighting has no open S-hooks and cages on lights. Duct over battery is secure. Need to verify S & W block walls.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Block walls are acceptable based on special Class II A classification per C-750, MO 9/2

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U

Comments (Additional pages may be added as necessary)

Small gap identified (less than 1/8") between some batteries. styrofoam ~~spacers~~ spacers were in place and judged to be sufficient to absorb impacts. no issue.

Evaluated by: *[Signature]* Date: 8/8/12
[Signature] 8/8/12

