

Please note that source, special nuclear, and byproduct materials, as defined in the Atomic Energy Act of 1954 (AEA) are regulated at the U. S. Department of Energy (DOE) facilities exclusively by DOE acting pursuant to its AEA authority. DOE asserts that pursuant to AEA, it has sole and exclusive responsibility and authority to regulate source, special nuclear, and byproduct materials at DOE-owned nuclear facilities. Information contained herein on radionuclides is provided for process description purposes only.

ISSUED BY
RPP-WTP PDC



Supplier Deviation Disposition Request

Page 1 of 2 ⁷ ~~2/9/10~~

PROJECT: River Protection Project Waste Treatment Plant

JOB No.: 24590

FOR RPP-WTP USE			
RPP-WTP SDDR No. 24590-WTP-SDDR-HV-10-00001	Rev. NA	DATE RECEIVED 03-Feb-10	
FOR SUPPLIER USE			
SUPPLIER SDDR No. SDDR-80100-5		DATE SUBMITTED 2/3/10	
1. Supplier Name FLANDERS\CSC	Address 531 FLANDERS FILTERS RD	City & State WASHINGTON, NC	Zip 27889
2. Supplier's Order No. 80100	3. RPP-WTP P.O. or SC 24590-QL-POA-MKH0-00001		Rev 7
4. Deviation Description (Attach extra sheets, photographs, sketches, etc. as necessary and identify quantity and serial Numbers as applicable) Safe Change HEPA Filter Housing Data Sheet 24590-LAW-MKD-LVP-00013 for Plant Item Numbers 24590-LAW-LVP-HEPA-00001A, 1B, 2A, 2B, 3A identifies nozzle loading to be applied to the housing. Additionally, BNI has requested one of these housings to be subjected to seismic shaker table testing. Flanders / M&D team has determined that it is not practical to apply external nozzle loads during seismic shaker table testing. It is inconsistent to apply nozzle loads for design/analysis of the housing and not apply nozzle loads during the seismic shake table testing.			
4a. Was an NCR issued? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Number <u>2/9/10</u> as confirmed w/ Flanders			
5. Supplier's Proposed Disposition: <input checked="" type="checkbox"/> Use As-Is <input type="checkbox"/> Repair <input checked="" type="checkbox"/> Modify RPP-WTP Requirement			
6. Supplier's Estimated Cost impact: none		7. Supplier's Estimated Schedule Impact: none	
8. Proposed Disposition and Technical Justification (plus Cost/Schedule if applicable): (Attach extra sheets, sketches, etc., as necessary.) Request for specification change <u>2/9/10</u> During the seismic shake table testing, external flexible ducting (hoses) will be necessary for airflow supply, however, these loads are small compared to nozzle loads that BNI has specified on the Safe Change HEPA Filter Housing Data Sheet for 24590-LAW-MKD-LVP-00013. Flanders/M&D is requesting the nozzle loads be reduced to simulate this flex connection. We will apply a <u>350 lb</u> effective mass in three orthogonal (x,y,z) directions to simulate the flex connection attached to the housing. The model will also include a 10" moment arm to simulate potential applied moments at the nozzle. <u>350 lb</u> as discussed w/ Flanders/M&D 2/10/10 as.			
9. Supplier's Authorized Representative Bill Peebles		Signature <i>Bill Peebles</i>	
Title Project Engineering		Date 2-3-10	
10. RPP-WTP Engineering Action <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input type="checkbox"/> See Below			

Distribution: Procurement and Subcontracts Construction

NOTES:

- Complete instructions provided at end of form.
- Items 1 through 9 and 17 to be completed by Supplier
- Items 10 through 16 and 18 to be completed by RPP-WTP.
- Non applicable items to be marked "N/A"
- Attach additional information whenever necessary
- RPP-WTP must be notified within 5 days after detection of deviation
- A copy of the completed SDDR form, with signatures in items 17 and 18, shall be included by the Supplier in the quality verification data package for each item to which this SDDR applies.



Supplier Deviation Disposition Request Engineering Disposition

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PROJECT: River Protection Project Waste Treatment Plant JOB NO.: 24590 SDDR: 24590-WTP-SDDR-HV-10-00001 Rev. N/A

Title of SDDR: Safe Change HEPA Filter Housing - LAW-MK-LVP-HEPA-00001A/B; -00002A/B; & -00003A

11. (OPTIONAL) RPP-WTP Provisional Disposition Statement (Attach extra sheets, sketches, etc., as necessary).

N/A

RPP-WTP Provisional Disposition Justification (Attach extra sheets, sketches, etc., as necessary).

N/A

ATS Number: 24590-WTP-ATS-QAIS- - N/A

RPP-WTP Provisional Disposition Approval:

RE/Originator:	<u>N/A</u>		
	<i>Print/Type Name</i>	<i>Signature</i>	<i>Date</i>
E&NS Review (when required):	<u>N/A</u>		
	<i>Print/Type Name</i>	<i>Signature</i>	<i>Date</i>
Approver:	<u>N/A</u>		
	<i>Print/Type Name</i>	<i>Signature</i>	<i>Date</i>

12. RPP-WTP Procurement and Subcontracts Action: Commercial Terms Impact:

- Yes** This SDDR grants relief from requirements or changes the requirements and; check each (consideration) item that applies:
- Modifications to governing terms are required and/or;
 - An increase in price is requested by Seller and/or;
 - A price credit from the supplier is due and/or;
 - An increase/decrease in the Seller promise delivery date is required.
 - Cost impact, if any is subject to a separate approval process as required by the changes clause.
- No** This SDDR grants relief from requirements or changes the requirements and all of the following apply:
- No commercial impact (No modification of governing commercial terms is required) and;
 - No increase in price is requested by Seller and;
 - No decrease in price is anticipated or required by Buyer and;
 - No extension of promised shipment is required

NOTES:

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3. Items 10 through 16 and 18 to be completed by RPP-WTP.
4. Non applicable items to be marked "N/A"

5. Attach additional information whenever necessary
6. RPP-WTP must be notified within 5 days after detection of deviation
7. A copy of the completed SDDR form, with signatures in items 17 and 18, shall be included by the Supplier in the quality verification data package for each item to which this SDDR applies.



Supplier Deviation Disposition Request Engineering Disposition

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PROJECT: River Protection Project Waste Treatment Plant JOB NO.: 24590 SDDR: 24590-WTP-SDDR-HV-10-00001 Rev. N/A

Title of SDDR: Safe Change HEPA Filter Housing - LAW-MK-LVP-HEPA-00001A/B; -00002A/B; & -00003A

13. Part of DCP?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	DCP Number: N/A	Rev
14. ACA Needed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	ACA Number: N/A	Rev

15. RPP-WTP Final Disposition Statement (Attach extra sheets, sketches, etc., as necessary).
 See provisional disposition above. Is the final disposition the same as the provisional disposition? Yes No N/A

RPP-WTP Engineering Disposition: "Modify RPP-WTP Requirement" as proposed is evaluated as acceptable with changes as discussed with Flanders.

The LAW-LVP Data Sheet 24590-LAW-MKD-LVP-00013, Rev 2 (also in Flanders' submittal 24590-QL-POA-MKH0-00001-01-00039, Rev 00A) provided nozzle loadings (page 4 of DS) based on CCN 139983. However, based on Flanders' initial evaluation of the design requirements, these nozzle loadings are too high for this type of safe change (4-pack) HEPA filter housing design, and will require "massive" structural reinforcement and support (not acceptable option) as reflected in Attachment A (For Information Only).

The WTP engineering agreed to provide expansion joints at the housing/piping connection interfaces, which would reduce the nozzle loadings to a minimum (allowable nozzle loadings to be confirmed by Flanders' calculation to be submitted for acceptance). WTP directed Flanders to submit an SDDR defining the allowable nozzle loadings that the subject LVP HEPA housing can be "reasonably" designed (Refer also to 24590-QL-POA-MKH0-00001-15-00002, Rev 00B).

Based on this SDDR, Flanders will apply a 350-lb mass (in lieu of 250-lb as initially proposed in this SDDR) in 3 orthogonal directions, and 10" moment arm to simulate potential applied moments at the nozzle in the structural analysis as well as during the seismic testing of a prototype unit.

This SDDR resolution will be reflected in Flanders' re-submittal of Data Sheet 24590-QL-POA-MKH0-00001-01-00039, specifically, deleting the tabulated interface design load requirements, and specify the 350-lb mass loading as described above.

RPP-WTP Justification (Attach extra sheets, sketches, etc., as necessary).

WTP DCN 24590-LAW-M6N-LVP-00071 added the required expansion joints at the HEPA housing nozzle interfaces as recommended to reduce the nozzle loadings to minimum, while Flanders' SDDR will apply a 350 lb mass in 3 orthogonal directions, and 10" moment arm to simulate potential applied moments at the nozzle.

NOTES:

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Complete instructions provided at end of form. 2. Items 1 through 9 and 17 to be completed by Supplier 3. Items 10 through 16 and 18 to be completed by RPP-WTP. 4. Non applicable items to be marked "N/A" | <ol style="list-style-type: none"> 5. Attach additional information whenever necessary 6. RPP-WTP must be notified within 5 days after detection of deviation 7. A copy of the completed SDDR form, with signatures in items 17 and 18, shall be included by the Supplier in the quality verification data package for each item to which this SDDR applies. |
|---|---|

Attachment to Section 2.5



**Supplier Deviation Disposition Request
Engineering Disposition**

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PROJECT: River Protection Project Waste Treatment Plant JOB NO.: 24590 SDDR: 24590-WTP-SDDR-HV-10-00001 Rev. N/A

Title of SDDR: Safe Change HEPA Filter Housing - LAW-MK-LVP-HEPA-00001A/B; -00002A/B; & -00003A

RPP-WTP Justification (Attach extra sheets, sketches, etc., as necessary).

This SDDR has been coordinated with Plant Design, EQ and E&NS and reviewed/evaluated as acceptable.

REQUIREMENTS REVIEW

Client Approval Required*	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	E&NS Screening Required	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Interface Resolution Required*	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

*Address these "yes" answers in the RPP-WTP Disposition Statement (above).

Affected RPP-WTP Documents:

Enter N/A or identify by number and current revision the specifications, drawings (including data sheets and engineering lists), supplier documents provided to another supplier, material requisitions (changes to Technical Notes only), and commercial grade dedication documentation. For specifications and drawings (including supplier documents provided to another supplier), indicate how the change will be incorporated. Changes to MR Technical Notes and commercial grade dedication documents are incorporated by design change. NOTE: When incorporation by design change is necessary for documents that are referenced by more than one procurement, see the SDDR Instructions for additional considerations.

Document Number	Rev	Remarks	Incorporation by	
			Design Change	Reference
24590-LAW-MKD-LVP-00013	2	This DS will be superseded by the Supplier submittal 24590-QL-POA-MKH0-00001-01-00039	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>

Affected Supplier Submittals:

Enter N/A or the supplier submittals that require resubmittal to incorporate the SDDR change (identify by RPP-WTP document number and revision).

Document Number	Rev	Document Number	Rev
24590-QL-POA-MKH0-00001-01-00039	00A		

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Attachment A

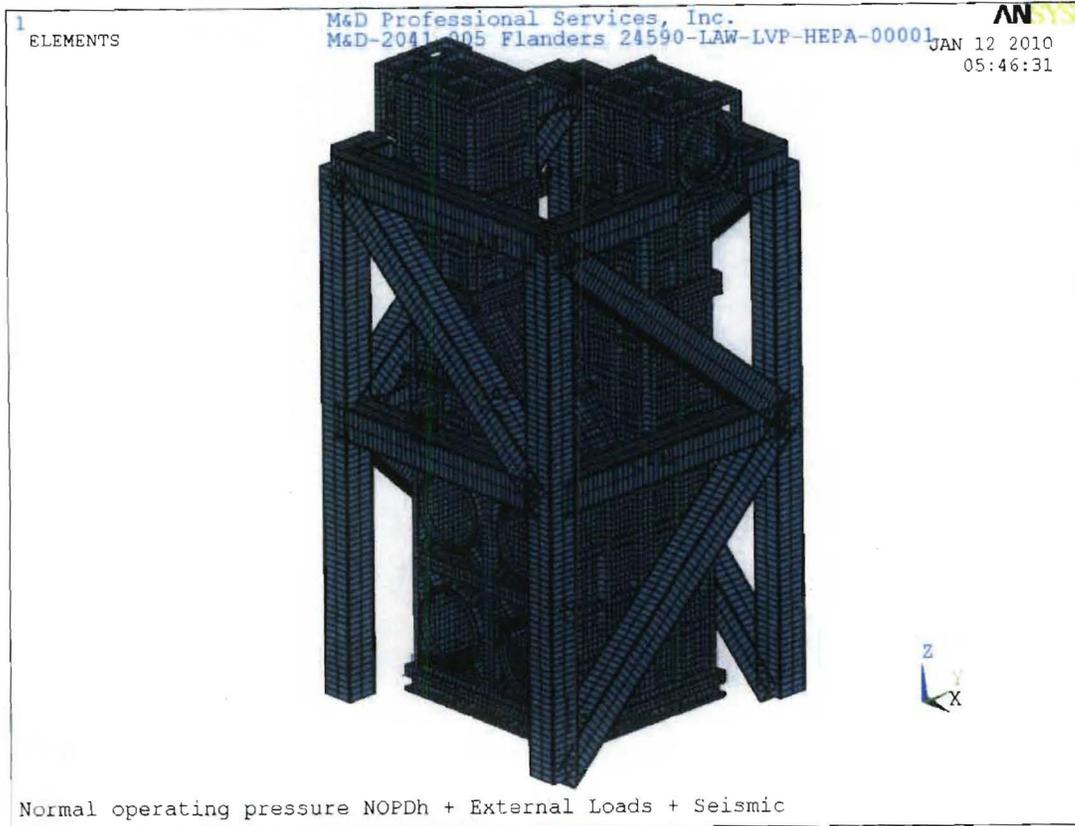


Figure 1: LVP Model with Support Frame

This support frame was designed to handle the LVP's large nozzle loading.

Load Case	F _A (lbs)	F _B (lbs)	F _C (lbs)	M _A (ft-lbs)	M _B (ft-lbs)	M _C (ft-lbs)
Weight	700	700	700	1200	800	800
Thermal	2000	700	2100	2800	3900	1000
Seismic	4000	900	2800	4200	4600	1900

The directions of the listed forces and moments are based on the following convention:

A axis = Axial to HEPA nozzle interface w/ BNI piping

B axis = Vertical

C axis = Lateral based on the Right Hand Rule

FOR INFORMATION ONLY

[NOTE: Above Table is based on LAW-LVP Data Sheet as reflected in Document Submittal 24590-QL-POA-MKH0-00001-01-00039, Rev 00A. This SDDR's proposed deviation and disposition will be reflected in the re-submittal of this Data Sheet. aj:2/9/10]

Attachment A

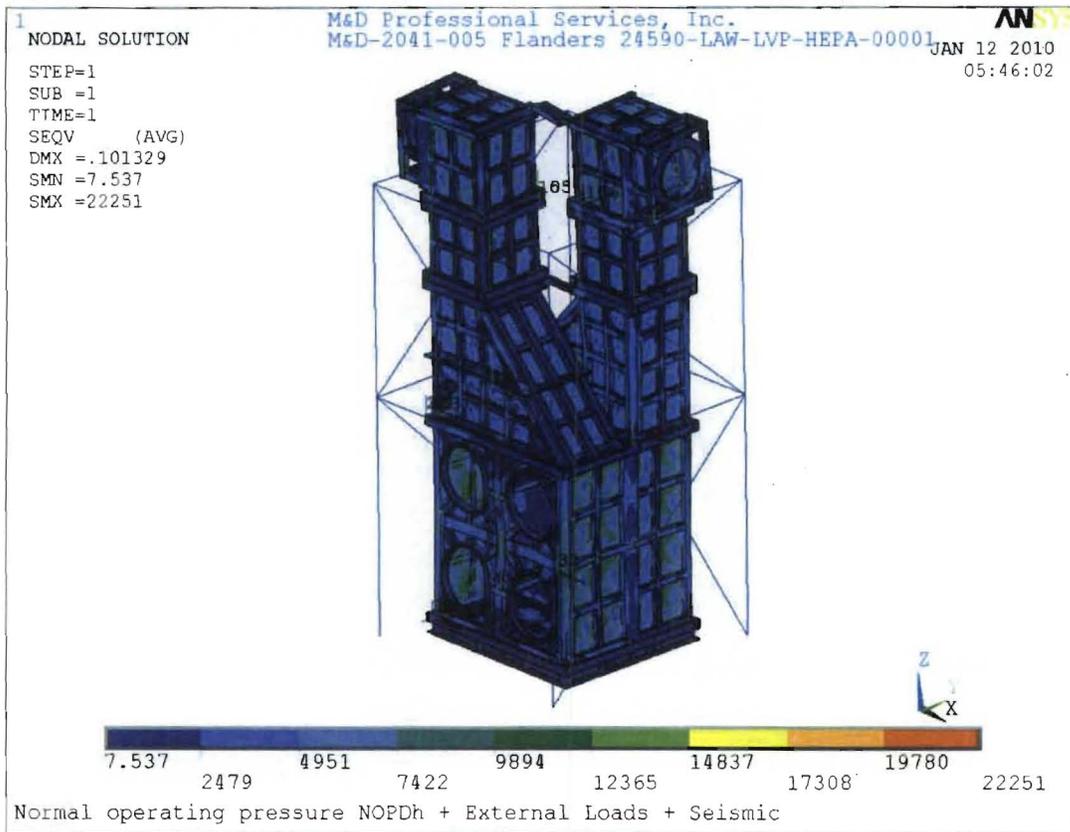


Figure 2: LVP Stress Results with Support Frame (Von Mises)

Normal Operating Pressure + DW + (Weight+Thermal+Seismic) External Nozzle Loads + Seismic:

Pressure= -195"wg

1g in Z-Direction

0.4g in X-Direction

0.4g in Y-Direction

Nozzle Loads used with all forces are in the (-) Direction and all Moments are in the (+) Direction.

FOR INFORMATION ONLY (see page A-1)

Some information on page(s) A-2 of 2 (SDDR p.7 & 7)
may appear to be illegible, however, the information
necessary for assuring adequate design is legible.

Signature: [Signature] Date: 3/1/10