



## Materials Inspection Report

<b>1. Licensee/Location Inspected:</b>  Hemlock Semiconductor Operations, LLC 12334 Geddes Road Hemlock, MI 48626  Report Number(s) 2023-001	<b>2. NRC/Regional Office</b>  Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352
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<b>3. Docket Number(s)</b> 030-37611	<b>4. License Number(s)</b> 21-32682-01	<b>5. Date(s) of Inspection</b> July 11, 2023
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**LICENSEE:**  
 The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Nuclear Regulatory Commission (NRC) rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector. The inspection findings are as follows:

1. Based on the inspection findings, no violations were identified.

2. Previous violation(s) closed.

3. During this inspection, certain of your activities, as described below and/or attached, were in violation of NRC requirements, and were assessed at Severity Level IV, in accordance with the NRC Enforcement Policy.

A. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy were satisfied.  
 (Non-cited violation(s) was/were discussed involving the following requirement(s))

B. The following violation(s) is/are being cited in accordance with NRC Enforcement Policy. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.  
 (Violations and Corrective Actions)

### Statement of Corrective Actions

I hereby state that, within 30 days, the actions described by me to the Inspector will be taken to correct the violations identified. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201 (corrective steps already taken, corrective steps which will be taken, date when full compliance will be achieved). I understand that no further written response to NRC will be required, unless specifically requested.

TITLE	PRINTED NAME	SIGNATURE AND DATE
LICENSEE'S REPRESENTATIVE		
NRC INSPECTOR	Ryan Craffey	 <small>Digitally signed by Ryan J. Craffey Date: 2023.07.26 19:11:20 -04'00'</small>
BRANCH CHIEF	Rhex Edwards	 <small>Digitally signed by Rhex A. Edwards Date: 2023.07.27 14:11:06 -05'00'</small>



Materials Inspection Record

1. Licensee Name: Hemlock Semiconductor Operations, LLC		2. Docket Number(s): 030-37611		3. License Number(s) 21-32682-01	
4. Report Number(s): 2023-001			5. Date(s) of Inspection: July 11, 2023		
6. Inspector(s): Ryan Craffey / Carol Dye		7. Program Code(s): 03120	8. Priority: 5	9. Inspection Guidance Used: IP 87121	
10. Licensee Contact Name(s): Jessica Kelly - Incoming RSO		11. Licensee E-mail Address: jessica.kelly@hscpoly.com		12. Licensee Telephone Number(s): 989-301-5331	

13. Inspection Type: <input type="checkbox"/> Initial		14. Locations Inspected: <input type="checkbox"/> Hybrid		15. Next Inspection Date (MM/DD/YYYY):	
<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Announced	<input checked="" type="checkbox"/> Main Office	<input type="checkbox"/> Field Office	07/11/2028	
<input type="checkbox"/> Non-Routine	<input checked="" type="checkbox"/> Unannounced	<input type="checkbox"/> Temporary Job Site	<input type="checkbox"/> Remote	<input checked="" type="checkbox"/> Normal	<input type="checkbox"/> Extended
				<input type="checkbox"/> Reduced	<input type="checkbox"/> No change

16. Location(s) Inspected List:

Main Office - 12334 Geddes Road, Hemlock, MI

17. Scope and Observations:

Hemlock Semiconductor Operations is a polycrystalline silicon manufacturer authorized to use sealed sources of radioactive material in fixed gauging devices for level measurements on process vessels at its facility in Hemlock, Michigan, and at the Dow Midland Operations (MiOps) complex in Midland, Michigan. At the time of the inspection, 14 Vega SH-F1, SH-F2, and SHLG gauges containing Cs-137 and/or Co-60 were in service and four Vega SHLG gauges were in storage at Hemlock. Seventeen additional gauges were in service at MiOps in areas now owned by the licensee. The licensee's RSO was based in Midland, and assisted in her oversight of the program by a maintenance coordinator in Hemlock and Dow's RSO in Midland.

The inspectors toured the facility in Hemlock. All areas were adequately posted, and all licensed material was adequately secured. The licensee did not currently possess a category 2 quantity of material (aggregated or otherwise), but continued to maintain independent security barriers on several large sources to limit aggregation regardless. Independent radiation surveys in unrestricted areas were well below regulatory limits to members of the public. All devices were in good condition and adequately labeled. Confirmatory surveys in the vicinity of each device were consistent with radiation profiles in the various SSDR safety evaluations. The inspector discussed lock-out/tag-out procedures and training for operational gauges and leak test collection with the RSO, and reviewed a selection of records including leak test, shutter check, physical inventory and survey documentation, as well as disposal records confirming all sources present at the time of the last inspection were accounted for.

No violations of NRC requirements were identified as a result of this inspection.

Signature and Date - Branch Chief



Digitally signed by Rhex A. Edwards  
Date: 2023.07.27 14:10:47 -05'00'