

NIOSH Reference: TN-22414 Mfr. Reference: GSFN1900b Centers for Disease Control and Prevention (CDC)

National Institute for Occupational Safety and Health (NIOSH) National Personal Protective Technology Laboratory (NPPTL) 626 Cochrans Mill Road

Pittsburgh, PA 15236-0070 Phone: 412-386-4000 Fax: 412-386-4051 March 6, 2019

Mr. Brian Weller President Global Safety First Paoli Executive Green 1, Suite 200 41 Leopard Road Paoli, Pennsylvania 19301

Dear Mr. Weller:

The National Institute for Occupational Safety and Health (NIOSH) has reviewed your request accepted July 6, 2018. This request was for approval of the N1900 series of air-purifying filtering facepiece respirators (part numbers N1901L, N1901X, N1902L and N1902X) for protections against particulates at N95 filter efficiency level. The complete respirator configurations are detailed on assembly matrix, file name N1900AMc.xls, revision c, dated: 02/26/19.

The site qualification conducted at your facility in Westminster, Maryland on November 28, 2018, and your responses to the Corrective Action Requests (CARs), specifically CARs 22414-01 through 22414-05 have been accepted and all the nonconformance issues related to the site qualification have been resolved.

This request is granted. Approvals are granted only for documentation written in the English language. It is the manufacturer's responsibility to correctly translate materials desired to be produced in languages other than English. Approval number TC-84A-8133 has been assigned. This respirator is approved for protection against particulates at N95 filter efficiency level.

NIOSH has also reviewed the quality manual file name N1900QMa.doc presented and finds that this manual meets or exceeds the minimum technical requirements for quality assurance plans as outlined in Title 42, Code of Federal Regulations (CFR), Part 84.41(a) and, on the basis of this review, this quality manual is accepted.

The final respirator approval label is included as an attachment to this letter. The abbreviated label has been accepted as submitted. The cautions and limitations which apply to this approval are on the approval label. Only those assemblies affected by this request, or where new approval numbers are assigned, apply to this approval action. Production approval labels cannot include information on unapproved configurations.

Page 2 – Brian Weller–TN-22414

The approved assembly consists of the parts as listed on the approval label and the assembly matrix. Parts are to be marked with the numbers indicated on the approval label in a legible and permanent manner (marking cannot be removed without evidence of its previous presence).

This certificate of approval is not an endorsement of the respirator by NIOSH, and such endorsement shall not be stated or implied in advertisements or other publicity. However, you may publicize the fact that this respirator has met the requirements of Title 42, *Code of Federal Regulations*, Part 84 (42 CFR 84).

No changes may be made to any respirators and accompanying documentation without prior written approval of NIOSH. Requests for changes must be submitted to NIOSH and a modification of this approval must be granted before changes are made.

Sincerely,

Jeffrey Peterson

Chief Conformity Verification and Standards Development Branch

Enclosures



National Institute for Occupational Safety and Health National Personal Protective Technology Laboratory Evaluation and Testing Branch

TEST REPORT

Task Number: TN-22414

Manufacturer: Global Safety First

Prepared by: Jeremy Brannen

Date: November 1, 2018

Tests Conducted by: Jeremy Brannen, Nichole Suhon

Respirator Tested: N1901L, N1901X, N1902L, N1902X

Background Information

Respirator tested as per test request.

Tests Assigned

Test Description	STP Number
A. Exhalation Resistance Test	TEB-APR-STP-0003
B. Inhalation Resistance Test	TEB-APR-STP-0007
C. Evaluation of Novel Head Harness	CVB-63C-STP-0015
D. Sodium Chloride (NaCl) N95 Test	TEB-APR-STP-0059

Overall Results

The respirator system tested did meet the requirements of all the above procedures.

National Institute for Occupational Safety and Health **Respirator Branch**



Task Number: TN-22414 Reference No.: CFR 84.180

Test: **Exhalation Resistance Test STP No.:** 3

Manufacturer: Global Safety First

Filter Type: Filter Only

Item Tested: N1901X/N1902X

Sample	Maximum Allowable Resistance (MM of H2O) Exhalation	Actual Resistance (MM of H2O) Exhalation	Result
1	25	9.4	PASS
2	25	9.7	PASS
3	25	9.9	PASS

Overall Result: PASS

Comments:

Samples 1 was the N1901X and sample 2 and 3 were the N1902X.

Was all equipment verified to be in calibration throughout all testing? Yes O No

Signature: Jaken **Date:** 10/23/2018

Engineering Technician

National Institute for Occupational Safety and Health Respirator Branch Test Data Sheet



Task Number: TN-22414 Reference No.: CFR 84.180

Test: Inhalation Resistance Test **STP No.:** 7

Manufacturer: Global Safety First **Item Tested:** N1901X/N1902X

Filter Type: Filter Only

Sample	Maximum Allowable Resistance (MM of H2O) Inhalation	Actual Resistance (MM of H2O) Inhalation	Result
1	35	10.7	PASS
2	35	11.9	PASS
3	35	11.4	PASS

Overall Result: PASS

Signature: Date: 10/23/2018

Engineering Technician

Task Number: TN-22414 **Reference No.:** CFR 84.180

Test: Inhalation Resistance Test **STP No.:** 7

Manufacturer: Global Safety First **Item Tested:** N1901X/N1902X

Comments:

Samples 1 was the N1901X and sample 2 and 3 were the N1902X.

Signature: Date: 10/23/2018

Engineering Technician

Novel Head HarnessTesting Report

CFR Reference No.: 84.63

Task Number: TN 22414

Manufacturer: Global Safety First

Item Tested: N1901L, N1901X,N1902L, N1902X

Minimum Fit Factor: 100

Subject	Facesize	Facerian	Re	sult
Subject	Pacesize	Facepiece	Trial 1	Trial 2
1820	8	N1902X	PASS	PASS
1828	9	N1901L	PASS	PASS
1825	8	N1902L	PASS	PASS
1811	8	N1901X	PASS	PASS
180				
int-t				
	2578 8818			
100				
<u> </u>				
		-	1	

Test Operator: Jeremy Brannen	Date: October 25, 2018

Comments:

Overall Result: PASS

All test subjects were medically cleared for testing. Subjects did the testing per procedure No. CVB-63C-STP-0015.

Was all equipment verified to be in calibration throughout testing? Yes

Equipment used in Testing	

Novel Head Harness Testing Report

Name	GAGEPak#	Calibration Due
TSI Portacount	000229	4/16/2020

National Institute for Occupational Safety and Health Respirator Branch Test Data Sheet



Task Number: TN-22414 Reference No.: CFR 84.181

Test: Sodium Chloride (NaCl) - N95 **STP No.:** 59

Manufacturer: Global Safety First **Item Tested:** N1901L/N1902L

Filter	Flow Rate	Initial Filter Resistance	Maximum Allowable Percent Leakage	Initial Percent Leakage	Maximum Percent Leakage	Result
1	85	5.6	5.00	0.259	0.313	PASS
2	85	14.8	5.00	0.393	0.393	PASS
3	85	15.2	5.00	0.262	0.262	PASS
4	85	11.5	5.00	0.217	0.217	PASS
5	85	14.0	5.00	0.342	0.342	PASS
6	85	9.9	5.00	0.339	0.549	PASS
7	85	12.5	5.00	0.322	0.322	PASS
8	85	10.3	5.00	0.159	0.161	PASS
9	85	8.0	5.00	0.120	0.120	PASS
10	85	10.9	5.00	0.194	0.194	PASS
11	85	8.9	5.00	0.322	0.322	PASS
12	85	10.8	5.00	0.389	0.389	PASS
13	85	11.1	5.00	0.348	0.348	PASS
14	85	14.7	5.00	0.284	0.284	PASS
15	85	13.5	5.00	0.341	0.341	PASS
16	85	13.7	5.00	0.299	0.299	PASS
17	85	11.3	5.00	0.255	0.255	PASS
18	85	7.6	5.00	0.091	0.091	PASS
19	85	11.5	5.00	0.224	0.224	PASS
20	85	12.4	5.00	0.282	0.282	PASS

Overall Result: PASS

Signature: Julian & Man

Date: <u>10/23/2018</u>

Task Number: TN-22414 Reference No.: CFR 84.181

Test: Sodium Chloride (NaCl) - N95 STP No.: 59

Manufacturer: Global Safety First **Item Tested:** N1901L/N1902L

Comments:

Samples 1-10: part number N1902L, tested on TSI 8130 machine 000333. Samples 11-20: part number N1901L, tested on TSI 8130 machine 000333. Only sample 1 was tested using N1900 housing due to the fixture breaking after the first sample.

Was all equipment verified to be in calibration throughout all testing?		Voc	No
was an equipment vermed to be in cambration unoughout an testing:	(•)	Yes	NO

Signature: Date: 10/23/2018