

**JOB / TASK ANALYSIS for
NNSA Package Certification Engineer Functional Area
Qualification Standard
DOE-STD-1026-2009**

Step 1 Identify and evaluate tasks

- Develop a comprehensive list of tasks that define the job.
 - o A great starting point is the list of Duties and Responsibilities from the FAQs.
 - o Give careful thought to additional tasks that could be considered.
 - o Don't worry about deleting tasks at this point – that is a part of the process further down.
- List the tasks (and their sources, e.g., Duties and Responsibilities #1) in the chart below.
- Discuss each task as a group and come to a consensus pertaining to Importance and Frequency of the task (i.e., each team member can consent to the assigned value, even if they don't exactly agree with it).
- When all values have been assigned, consider as a group deleting tasks that receive low scores for Importance.

Job Analysis Worksheet for Tasks

Task	Source	Importance	Frequency
A. Serve as chairperson for the Transportation Safety Review Panel (TSRP) to review application for OTCs, OTDs and OTAs; arbitrate and resolve Panel comments.	D&R 1.1 DOE O 461.1B (m.3)	5	2
B. Authorizes and revokes authorization of users of NNSA certified Type B packages	DOE O 461.1B (m.7) DOE O 460.1C (5.b.(1)(e)) DOE O 461.2 (5.i(5))	3	1
C. Reviews and processes applications for DOT Special Permits and forwards to DOT.	DOE O 460.1C (5.b.(5))	2	1
D. Provides training on packaging and transportation matters.	DOE O 460.1C (5.b(8)) DOE O 461.2 (5.i(7))	2	1

Task	Source	Importance	Frequency
E. Review SARPs, TSRAs, and HARs for compliance with regulations, orders, and guidelines.	D&R 1.2 DOE O 461.1B (m.8), DOE O 460.1C(5.b.(1)(b))	5	2
F. Prepare the Safety Evaluation Report (SER) and provide to appropriate parties to document the review of a Safety Analysis Report for Packaging (SARP), Transportation System Risk Assessment (TSRA), or Hazards Analysis Report (HAR).	D&R 1.3 DOE O 461.1B (m.3, 12)	5	2
G. Prepare and Authorizes Offsite Transportation Certificates (OTC) or Offsite Transportation Authorizations (OTA).	D&R 1.4 DOE O 461.1B (m.5) DOE O 460.1C (5.b.(1)(c and d)) DOE O 461.2 (5.i(3))	5	2
H. Evaluate Type B packages certified by the UK Ministry of Defence that will be transported in the Transportation Safeguards System.	SG-500 (3.5.7)	5	1
I. Reviews NNSA request for use of DOT-IAEA, CoCAs or CACs for international transportation and CoCs and forwards requests to the appropriate agency.	DOE O 460.1C (5.a.(7))	3	1
J. Interface with Office of Secure Transportation (OST) personnel regarding shipping schedules and OTA/OTC requirements.	D&R 1.6	3	3
K. Coordinate with OST to ensure that tie-down procedures are developed and approved for packages before OTC/OTA issuance.	D&R 1.7 DOE O 461.1B (m.11)	2	2
L. Provide technical safety information to the CDNS and Director of Office of Safety in support of OTDs and exemption requests from DOE O 461.1B.	D&R 1.8 DOE O 461.1B (4.e.2)	4	1
M. Provide support to DOE and NNSA organizations to conduct oversight of NNSA packaging,	D&R 2.1 DOE O 461.1B (m.10, 14)	3	1

Task	Source	Importance	Frequency
transportation and transfer activities at user sites per DOE O 226.1A and conducts their own NA-174 periodic oversight and audits.	DOE O 460.1C (5.b(11)) DOE O 461.2 (5.i(8,10))		
N. Review and approve site specific packaging procedures and 10 CFR71 Subpart H Quality Assurance (QA) plans.	D&R 2.2 DOE O 461.1B (m.4) DOE O 460.1C (5.b(12)) DOE O 461.2 (5.i(6))	4	1
O. Develop and issues supplemental policy and guidance to assist sites preparing documentation in support of NNSA transportation and packaging safety and shipment requests.	D&R 3.1 DOE O 460.1C (5.b.(10))	3	1
P. Provide technical guidance to NNSA HQ and sites regarding SARP preparations, regulations, guidelines, and orders related to P&T.	D&R 3.2 DOE O 460.1C (5.b.(1)(a))	3	2
Q. Provides guidance to field organization and contractors who prepare TSDs.	DOE O 461.2 (5.i(1))	1	0-1
R. Provide SMEs to support the federally chaired TSD Team or in conduction the TSD review/comment process.	DOE O 461.2 (5.i(2,9))	1	0-1
S. Support sites with onsite container development.	DOE M 441.1-1 (task driven – no resp. in manual)	2	1

Importance Scale	Frequency
How important is this task to the job?	How often is the task performed?
0 = Not Performed	0 = Not Performed
1 = Not Important	1 = Every few months to yearly
2 = Somewhat Important	2 = Every few weeks to monthly
3 = Important	3 = Every few days to weekly
4 = Very Important	4 = Every few hours to daily
5 = Extremely Important	5 = Hourly to many times each hour

Conclusions:

- Frequency and importance are not linked for many tasks. Importance is more relevant to development of standard.
- Several new tasks (in addition to the Duties and Responsibilities in the Standard) have been added (B, C, D, H, I, Q, R, S). These tasks are tied to directives that are/will be called out in the competencies.

Step 2 Identify and evaluate competencies

A competency is a measurable pattern of knowledge, skills, abilities, behaviors and other characteristics that an individual needs in order to perform work roles or occupational functions successfully.

- Identify the competencies directly related to performance on the job.
- Discuss each competency as a group and come to a consensus pertaining to Importance and Need at Entry of the competency.
- When all values have been assigned, consider as a group deleting tasks that receive low scores for Importance.

Job Analysis Worksheet for Competencies

Competency	Source	Importance	Need at Entry
1. Working level knowledge of DOE O 461.1A	FAQS Development Team	5	2
2. Working level knowledge of information required in Chapter 1 of the Safety Analysis Report for Packaging (SARP)	FAQS Development Team	5	5
3. Working level knowledge of information required in Chapter 2 of the SARP	FAQS Development Team	5	5
4. Working level knowledge of information required in Chapter 3 of the SARP.	FAQS Development Team	5	5
5. Working level knowledge of information required in Chapter 4 of the SARP.	FAQS Development Team	5	5
6. Working level knowledge of information required in Chapter 5 of the SARP.	FAQS Development Team	5	5
7. Working level knowledge of information required in Chapter 6 of the SARP.	FAQS Development Team	5	5
8. Working level knowledge of information required in Chapter 7 of the SARP.	FAQS Development Team	5	5
9. Working level knowledge of information required in Chapter 8 of the SARP.	FAQS Development Team	5	5
10. Working level knowledge of information required in Chapter 9 of the SARP.	FAQS Development Team	5	5

Competency	Source	Importance	Need at Entry
11. Working level knowledge of elements and their evaluation in Probabilistic Risk Assessment section of a Transportation System Risk Assessment (TSRA)	FAQS Development Team	4	5
12. Working level knowledge of the required format and content of a Hazards Analysis Report (HAR)	FAQS Development Team	5	3
13. Familiarity level knowledge of: Regulatory Guide (RG) 7.6, RG 7.8, RG 7.10, RG 7.11, Safety Guide (SG) 100, SG 140.1, SG 600, 49 CFR 100-185.	FAQS Development Team	4	4
14. Working level knowledge of: RG 7.9, SG 500	FAQS Development Team	5	3
15. Familiarity level knowledge of process for certifying UK packages within the US	FAQS Development Team	3	5
16. Working level knowledge of the transportation requirements and interface with the Office of Secure Transportation	FAQS Development Team	3	3
17. Familiarity level knowledge of 10 CFR 830.204, DOE G 421.1-2, and DOE M 461.1-1.	FAQS Development Team	2	5
18. Familiarity level knowledge of Price-Anderson Amendment Act and its relationship to Subparts A and B of 10 CFR 830.	FAQS Development Team	2	5
19. Demonstrate writing and performance skills: <ul style="list-style-type: none"> • Participate in review of a SARP. • Write a SER documenting HAR review. • Write a SER documenting SARP review. • Write an OTC and OTA • Participate in P&T appraisal • Participate in development/revision of NNSA guidance document 	FAQS Development Team	5	5
20. Working level knowledge of assessment techniques.	FAQS Development Team	3	5
21. Familiarity level knowledge of DOE P 450.4, DOE P 226.1A, DOE O 226.1A.	FAQS Development Team	2	5

Importance Scale	Need At Entry Scale
-------------------------	----------------------------

How important is this competency for effective job performance?	When is this competency needed for effective job performance?
1 = Not Important	1 = Needed the first day
2 = Somewhat Important	2 = Must be acquired within the first 3 months
3 = Important	3 = Must be acquired within the first 4-6 months
4 = Very Important	4 = Must be acquired after the first 6 months
5 = Extremely Important	5 = Must be acquired prior to qualification

Conclusions:

Directives highlighted in yellow have been superseded since the standard was issued.

- O 461.1A superseded by O 461.1B (12/16/10) → covered by FY12 continuing training
- G 421.1-2 superseded by G 421.1-2A (12/19/11) → plan for FY13 continuing training
- M 461.1-1 replaced by O 461.2 (11/1/10) → covered by FY12 continuing training
- G 423.1-1 superseded by G 423.1-1A (11/3/10) → covered by FY12 continuing training
- P 450.4 superseded by P 450.4A (4/25/11) → covered by FY12 continuing training
- P226.1A superseded by P 226.1B (4/25/11) → plan to include with FY12 O226.1B continuing training
- O 226.1A superseded by O 226.1B (4/25/11) → covered by FY12 continuing training

Step 3 Evaluate linkage between tasks and competencies

This step demonstrates that there is a clear relationship between the tasks performed on the job and the competencies required to perform the tasks.

- Evaluate each competency for its importance in effective performance of each task.
- When finished, verify that each competency is important to the performance of at least one task.

Job Analysis Worksheet For Task And Competency Linkage

Task Letter	Competency Number																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
A	3	5	5	5	5	5	5	5	5	5	5	5	5	5	1	3	1	1	5	NA	1
B	5	3	3	3	3	3	3	3	3	3	1	1	2	5	1	3	1	1	2	NA	2
C	NA	1	1	1	1	1	1	1	1	1	NA	NA	4	1	NA	1	NA	1	1	NA	1
D	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	2	1	1	1	1	1
E	3	5	5	5	5	5	5	5	5	5	5	5	5	5	1	3	1	1	5	1	1
F	2	4	4	4	4	4	4	4	4	4	4	4	2	2	1	1	1	1	5	1	1
G	2	4	4	4	4	4	4	4	4	4	4	4	2	2	1	1	1	1	5	1	1
H	2	5	5	5	5	5	5	5	5	5	NA	NA	5	5	5	2	NA	NA	5	NA	1
I	NA	5	5	5	5	5	5	5	5	1	NA	NA	5	5	NA	2	NA	1	5	NA	1
J	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	1	1	1	NA	1
K	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	5	1	1	1	NA	1
L	4	3	3	3	3	3	3	3	3	3	5	NA	2	2	NA	2	NA	1	1	NA	1
M	4	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	5	5	5
N	4	2	2	2	2	2	2	5	5	5	2	NA	1	1	NA	2	1	1	1	1	1
O	3	3	3	3	3	3	3	3	3	3	3	3	5	5	1	2	1	1	5	2	1
P	3	3	3	3	3	3	3	3	3	3	1	1	5	5	1	2	1	1	5	2	1
Q	NA	1	1	1	1	1	1	1	1	1	1	NA	1	1	NA	1	5	3	1	NA	1
R	NA	1	1	1	1	1	1	1	1	1	1	NA	1	1	NA	1	5	3	1	NA	1
S	NA	1	1	1	1	1	1	1	1	1	NA	NA	NA	NA	NA	NA	2	2	2	NA	1

Linkage Scale

How important is this competency for effective task performance?

- 1 = Not Important
- 2 = Somewhat Important
- 3 = Important
- 4 = Very Important
- 5 = Extremely Important

N/A = Not Applicable

Recommendations for the next scheduled revision of the Standard.

- Competencies should be updated as needed to specify current directives and ensure technical content still appropriate. It is known that there are significant differences between O 461.1A/O 461.1B and M 461.1-1/O 461.2, so Competencies 1 and 17 will need to be revised.
- A new competency should be added covering O 460.1C
- A new competency should be added covering M 441.1-1