

# Accelerator Readiness Review Determination

This Form will be used to determine what level of review is needed for a given new/change in activity, using the flowchart on page 4 for guidance.

Title: \_\_\_\_\_ Date: \_\_\_\_\_

## Scope

## Considerations *Attach additional pages as necessary to provide full descriptions. Discuss if something is considered significant or not.*

Does the activity involve operations of an accelerator, OR only support functions?	
If the activity involves operations of an accelerator, is the accelerator considered “equivalent” or “exempt” as defined in DOE O 420.2D §3.c? (i.e., managed as an RGD)	
Is this activity (i.e., support function, accelerator, RDG, etc.) new or existing?	
If the activity is existing accelerator operations, is this resuming previous operations, OR a new module/mode of operations?	
What changes/modifications have been made? (i.e., equipment, shielding, interlocks, controls, operations, hazards, procedures, etc.)	
How long has it been since the accelerator operated in this area?	
Since the last time beam was operated, have there been any significant change in personnel? (For accelerator operations.) (i.e., Operators, RSO, DSO, Beamline Physicists, Machine Department, etc.)	

## Review Level

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> ARR <sup>1,3</sup>    | <input type="checkbox"/> Primarily external review committee | <input type="checkbox"/> Primarily internal review committee |
| <input type="checkbox"/> IRR <sup>1,3</sup>    | <input type="checkbox"/> Primarily external review committee | <input type="checkbox"/> Primarily internal review committee |
| <input type="checkbox"/> ORC(s) <sup>2,3</sup> | <input type="checkbox"/> Internal reviewers                  | <input type="checkbox"/> Include external reviewer(s)/SME(s) |
| <input type="checkbox"/> None <sup>3</sup>     |  |  |

<sup>1</sup> Use Fermilab Accelerator Readiness Review (ARR) Plan to plan & facilitate review, and obtain approval to begin operations.

<sup>2</sup> For activities that do not require an ARR, the ORC process and tool may be used to document both reviews of individual equipment/subsystems as well as "full system" reviews.

<sup>3</sup> For any new/restart activity involving accelerator beam, the Start-Up Sign-Off (SUSO) process described in ADAP-11-0001, Beam Permit, Running Condition and Startup, will be followed before beam operations.

## Review Elements

ARRs should include all elements as required in DOE O 420.2D Section 4.b and associated CRD. For IRRs, justification should be provided for elements not included.

ELEMENTS FROM DOE O 420.2D & ASSOCIATED CRD	JUSTIFICATION FOR ELEMENTS NOT INCLUDED LIMITED SCOPE ARRs
<b>An approved accelerator safety envelope (ASE)</b>	
<b>A safety assessment document (SAD)</b>	
<b>Clearly defined roles and responsibilities for accelerator activities, including those for training and procedures</b>	
<b>An unreviewed safety issue (USI) Process</b>	
<b>An accelerator readiness review (ARR) program that ensures facilities are adequately prepared for safe commissioning and operations</b>	
<b>A current listing/inventory of accelerators under DOE O 420.2D and exemptions or equivalencies granted in accordance with DOE O 420.2D</b>	
<b>A Contractor Assurance System that maintains an internal assessment process</b>	
<b>A Facility Configuration Management Program that is related to accelerator safety</b>	
<b>Credited Controls and appropriate administrative processes related to accelerator safety (e.g., training, procedures, etc.)</b>	

Additional elements listed below should be considered for all levels of review. Indicate which elements will be included in the review.

ADDITIONAL ELEMENTS TO CONSIDER	
<input type="checkbox"/>	Scope of activities (i.e., beam operation, experiments, support work, etc.)
<input type="checkbox"/>	Commissioning and Operations plan(s)
<input type="checkbox"/>	Standard Operating Procedures (SOPs) (e.g., for equipment use, etc.)
<input type="checkbox"/>	Equipment and/or subsystem ORC(s)
<input type="checkbox"/>	Administrative controls (i.e., building access, training/qualifications requirements, etc.)
<input type="checkbox"/>	Personnel (i.e., roles and responsibilities, training & qualification program, etc.)
<input type="checkbox"/>	Other:
<input type="checkbox"/>	Other:

## Determinations

Determinations should be made by the ESH Accelerator Safety Department Head, assigned RSO, DSO, and Activity Owner and approved by the Senior Radiation Safety Office (SRSO) & Chief Safety Officer (CSO). Determinations should be communicated to the Fermilab Site Office (FSO) and other stakeholders (i.e., Director, Project Owner, etc.) as necessary.

**Discussion** *Summarize the considerations and/or discussion that led to the determination. Attach additional pages as needed.*

## Determined By

\_\_\_\_\_  
ESH Accel. Safety Dept. Head

\_\_\_\_\_  
Activity Owner

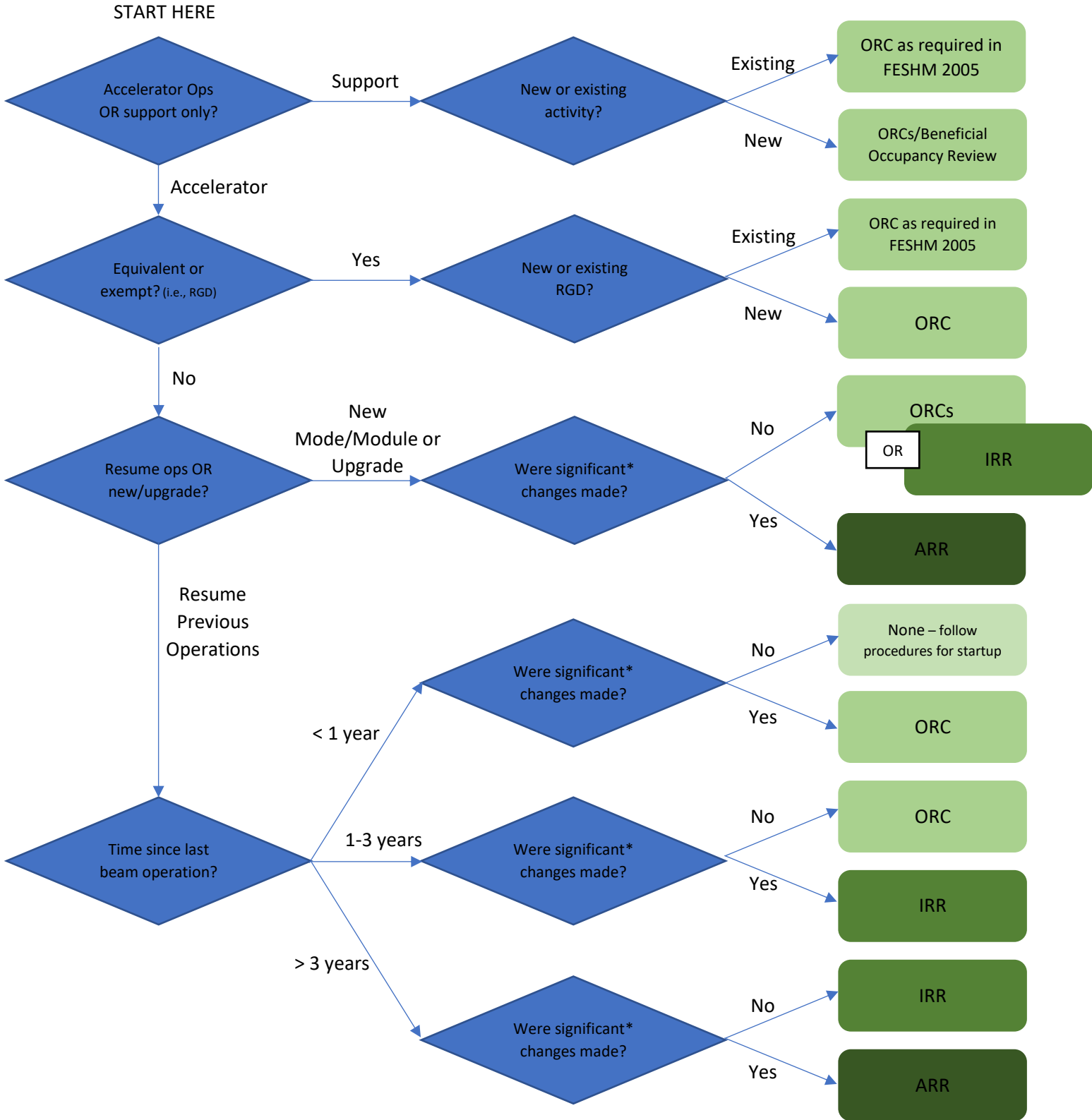
## Approvals

\_\_\_\_\_  
Directorate ALD or Division Director

\_\_\_\_\_  
Senior Radiation Safety Officer  
(SRSO)

\_\_\_\_\_  
Chief Safety Officer (CSO)

# Determination Guidance Flowchart



\*as determined by the ESH Accel. Safety Dept. Head, RSO, DSO, Activity Owner and D/D Head