

1 STEPHAN C. VOLKER (CSB #63093)
JOSHUA A. H. HARRIS (CSB #226898)
2 DANIEL P. GARRETT-STEINMAN (CSB #269146)
LAW OFFICES OF STEPHAN C. VOLKER
3 436 14th Street, Suite 1300
Oakland, California 94612
4 Tel: 510/496-0600
Fax: 510/496-1366

5 Attorneys for Plaintiff
6 SAVE STRAWBERRY CANYON,
a non-profit California public benefit corporation
7
8

9 IN THE UNITED STATES DISTRICT COURT
10 FOR THE NORTHERN DISTRICT OF CALIFORNIA
11

12 SAVE STRAWBERRY CANYON, a non-profit)
California public benefit corporation,)

13)
14 Plaintiff,)

15)
16 v.)

17 STEVEN CHU, Secretary of the United States)
Department of Energy; AUNDRA RICHARDS,)
18 Site Office Manager, United States Department)
of Energy Berkeley Site Office; and UNITED)
19 STATES DEPARTMENT OF ENERGY, a)
federal agency,)
20)

21 Defendants.)
22)
23)
24)
25)
26)
27)
28)

Civ. No. CV 10-00797 VRW

**PLAINTIFF’S NOTICE OF MOTION
AND MEMORANDUM OF POINTS AND
AUTHORITIES IN SUPPORT OF
MOTION FOR SUMMARY JUDGMENT**

Honorable Vaughn R. Walker

Date: December 9, 2010
Time: 10 a.m.
Courtroom: 6

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1 **NOTICE OF MOTION AND MOTION FOR SUMMARY JUDGMENT**

2 TO DEFENDANTS AND THEIR ATTORNEYS OF RECORD:

3 PLEASE TAKE NOTICE that at 10:00 a.m. on December 9, 2010, or as soon thereafter as this
4 matter may be heard in the United States District Court for the Northern District of California, located at
5 450 Golden Gate Ave., San Francisco, CA, 94102, plaintiff Save Strawberry Canyon will, and hereby
6 does, move the Court for an order for summary judgment on the grounds that there are no genuine issues
7 of material fact in dispute, and plaintiffs are entitled to judgment as a matter of law for the reason that
8 defendants, the Department of Energy, *et al.*, failed to comply with NEPA. This motion is based on this
9 Notice of Motion and Motion, the accompanying Memorandum of Points and Authorities, the
10 Administrative Record lodged in this matter, the pleadings and records on file in this matter, and on such
11 argument of counsel as may be heard at the hearing on this motion.

12 Dated: September 3, 2010

Respectfully submitted,

13 LAW OFFICES OF STEPHAN C. VOLKER

14 /s/ Stephan C. Volker
15 STEPHAN C. VOLKER
16 Attorney for Plaintiffs
 SAVE STRAWBERRY CANYON

17 **MEMORANDUM OF POINTS AND AUTHORITIES**

18 **I. INTRODUCTION**

19 Plaintiff asks this Court to set aside defendants’ approval of the proposed Berkeley Lab Laser
20 Accelerator (the “project” or “BELLA”) and its Environmental Assessment (“EA”) because they fail to
21 comply with the National Environmental Policy Act, 42 U.S.C. § 4321 *et seq.* (“NEPA”), and the
22 Administrative Procedure Act, 5 U.S.C. §§ 701-706 (“APA”).

23 The project entails constructing a uniquely powerful, experimental, radiation-emitting, hazardous
24 waste-producing, laser accelerator in Blackberry Canyon at Lawrence Berkeley National Lab (“LBNL”)
25 in Berkeley, California. The proposed site for the project lies in close proximity to private residences and
26 the Lawrence Hall of Science, a children’s science museum. Further, the locale is extremely vulnerable
27 to earthquakes and wildfires and is located within the State of California’s official hazard zone for
28

1 earthquake-induced landsliding. Despite the obvious risks posed by BELLA, the Department of Energy
2 (“DOE”) refused to prepare a comprehensive Environmental Impact Statement to analyze the potentially
3 significant impacts of the project. Instead, it elected to address these concerns in an EA.

4 The EA, however, completely glosses over *the key concern* about this project: whether
5 construction and operation of the facility on unstable steep slopes near the Bay Area’s most dangerous
6 earthquake fault in the vicinity of private residences and a children’s museum threatens the public health
7 and safety. The EA fails to adequately disclose and discuss the project’s radiation impacts, hazardous
8 waste, and geologic instability. Even the DOE employees charged with overseeing the preparation of the
9 EA admitted, in writing, that “the EA does not do a very good job” analyzing certain radiation-related
10 impacts, but refused to “revise the EA” to fix the problem. Administrative Record, Tab 19, p. 459
11 (“AR19:0459”). Instead, the preparers opted to see if any public commenter identified the errors and
12 informational gaps in the EA, at which point DOE apparently intended to belatedly address these issues
13 not in the required EIS, but rather in DOE’s responses to the public comments. *Id.* (“If the public
14 comments on the lack of accident analysis we can provide the analysis in the response to the comment”).
15 This type of hide-the-ball approach permeates DOE’s analysis of BELLA and highlights DOE’s failure to
16 conduct an adequate environmental review of the project.¹

17 Additionally, DOE failed to comply with NEPA’s requirements to consider alternative offsite
18 locations, respond to all public comments, provide an adequate project description, and describe and
19 discuss in the EA mitigation measures that would address the project’s adverse impacts. And finally,
20 DOE violated NEPA’s prohibition against incorporating by reference voluminous documents into an EA.

21 Accordingly, plaintiff asks this Court to (1) declare that defendants have failed to comply with
22 NEPA’s requirements in their approval and environmental review of the project and (2) permanently
23 enjoin the project pending defendants’ compliance with NEPA.

24 II. STATEMENT OF FACTS

25
26 ¹ *E.g.*, AR22:0544 (“[i]f EPA submits” comments on the project’s radionuclide emissions
27 “from their review of the EA we can answer it in the reply to comments”); AR20:0460 (email
28 advocating minimizing discussion of operational traffic in the EA and then “focus[ing] on any
particular issues that come back in the public comments in [DOE’s] Final EA response” and
admitting that this strategy is “not the perfect way to prepare an environmental analysis . . .”).

1 On June 17, 2009, DOE issued a Notice of Availability of a Draft Environmental Assessment of
2 BELLA. AR18:0455-0458. BELLA is part of DOE’s High Energy Physics (“HEP”) program, which
3 “supports the development of particle accelerators at increasingly higher energies,” so as to “provide
4 intense energy beams for scientific and technological research.” AR7:0079. BELLA would be capable of
5 accelerating particles to 10 giga electron-volts (10 billion electron-volts) of energy in a distance of 1
6 meter. *Id.* Operation of such an accelerator “produce[s] a variety of radiation fields,” including
7 “neutrons, gamma rays, muons, and other radiations of which neutrons *have the highest intensity, and are*
8 *the most damaging from a health risk point of view.*” AR7:0174 (emphasis added); AR26:0643 (“Several
9 types of radiation will be generated [during project operations] including gamma-rays, neutrons and
10 photomuons. There may also be activated gas production”).

11 The project would be located in Blackberry Canyon at LBNL in Berkeley, California. The project
12 site is located approximately 590 feet from the nearest private residence and 728 feet from the Lawrence
13 Hall of Science, a popular children’s museum frequented by young children throughout the year,
14 including frequent field trips from area schools. A telling graphic depiction of the proximity of the
15 residential neighborhoods and the Lawrence Hall of Science to the project site is located on page 113,
16 volume 7, of the Administrative Record. AR7:0113. The project site is situated in a seismically active
17 area that is prone to groundshaking, landslides, and wildfires. AR7:0099-0100. It is located in the State
18 of California’s “official hazard zone for earthquake-induced landsliding.” AR7:0009.

19 The proposed project would require extensive modification of 7,000 square feet of Building 71 at
20 LBNL, and would involve the addition of another 2,000 square feet to that building. AR7:0068. Various
21 widths and types of shielding would be installed around the actual accelerator, with the aim of protecting
22 workers and nearby residents from the project’s radiation emissions. AR7:0069. According to the
23 DOE’s EA, construction would involve excavation about 16 feet below floor level to install piers to
24 support the shielding. AR7:0070. Recent modifications to the project indicate that the piers will be
25 “designed to go deeper than previously projected (approximately 25 ft now . . .).” AR1:0001. The
26 project site is currently contaminated from past LBNL use and project demolition and construction
27 activities will generate hazardous waste. *Id.*; AR7:0089 (“Approximately 10 percent of the shipments of
28 materials generated by the Proposed Action would be expected to have some hazardous characteristics”).

1 DOE predicted that the following hazardous waste materials are likely to be present at the project site:
2 asbestos, lead, beryllium, poly-chlorinated biphenyls, radioactive materials, Americium-241, Cesium-
3 137, and Curium-244. AR7:0102-103.

4 After receiving public comment, defendants released the Final Environmental Assessment,
5 Finding of No Significant Impact, and Approval Memo on September 4, 2009. AR Tabs 6, 7, and 8.
6 Defendants concluded that the project would not have any significant impacts and accordingly approved
7 the project without first preparing an Environmental Impact Statement. *Id.* Plaintiff filed its Complaint
8 on February 25, 2010, a First Amended Complaint June 17, 2010, and its standing Declarations of Lesley
9 Emmington Jones, Sylvia McLaughlin, Georgia Wright, Gene Bernardi, Daniella Thompson, John
10 Shively and Carole Schemmerling on June 18, 2010.

11 III. STANDARD OF REVIEW

12 Summary judgment is proper if there is no genuine issue as to any material fact and the moving
13 party is entitled to judgment on a particular claim or defense as a matter of law. Fed.R.Civ.P. 56(c): *see*
14 *also, Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986). Upon a showing that there is no genuine issue
15 as to a claim, the court may grant summary judgment in the party’s favor “upon all or any part thereof.”
16 Fed.R.Civ.P. 56(b). Under the Administrative Procedure Act (“APA”), an agency’s action “must be set
17 aside if the action was ‘arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with
18 law’ or if the action failed to meet statutory, procedural, or constitutional requirements.” *Citizens to*
19 *Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 414 (1971), quoting 5 U.S.C. § 706(2). “In
20 determining whether an action is arbitrary or capricious, [the court] consider[s] ‘whether the decision was
21 based on a consideration of the relevant factors and whether there has been a clear error of judgment.’”
22 *Nevada Land Action Ass'n v. U.S. Forest Service*, 8 F.3d 713, 716 -717 (9th Cir. 1993).

23 IV. ARGUMENT

24 NEPA “is our basic national charter for protection of the environment. It establishes policy, sets
25 goals . . . , and provides means . . . for carrying out the policy.” 40 C.F.R § 1500.1(a).² The purpose of
26

27
28 ² The Council on Environmental Quality has promulgated regulations implementing
NEPA; these regulations have been adopted by DOE. 10 C.F.R. § 1021.103.

1 NEPA is “to help public officials make decisions that are based on understanding of environmental
2 consequences, and take actions that protect, restore, and enhance the environment.” 40 C.F.R. §
3 1500.1(c). NEPA “does not work by mandating that agencies achieve particular substantive
4 environmental results.” *Marsh v. Oregon Natural Resources Defense Council*, 409 U.S. 360, 371 (1989).
5 Instead, its “procedures . . . insure that environmental information” of “high quality” is “available to
6 public officials and citizens before decisions are made and before actions are taken.” 40 C.F.R. §
7 1500.1(b).

8 Courts have repeatedly noted the exceptionally broad scope of NEPA. *See, e.g., Calvert Cliffs’*
9 *Coordinating Committee, Inc. v. Atomic Energy Comm’n*, 449 F.2d 1109, 1122 (D.C.Cir. 1971). By its
10 terms, NEPA mandates the preparation of an EIS for all “major federal actions significantly affecting the
11 quality of the human environment” 42 U.S.C. § 4332(2)(c); *see also Kleppe v. Sierra Club*, 427
12 U.S. 390, 399 (1976). “The statutory phrase ‘actions significantly affecting the quality of the
13 environment’ is intentionally broad, reflecting the Act’s attempt to promote an across-the-board
14 adjustment in federal agency decision making so as to make the quality of the environment a concern of
15 every federal agency.” *Scientists’ Institute for Public Information, Inc. v. Atomic Energy Comm’n*, 481
16 F.2d 1079, 1088 (D.C.Cir. 1973). “NEPA represents a firm Congressional mandate that environmental
17 factors be considered on an equal basis with other, more traditional, concerns.” *Foundation for North*
18 *American Wild Sheep v. U.S. Dept. of Agr.*, 681 F.2d 1172, 1177 (9th Cir. 1982), *citing Calvert Cliffs’*,
19 449 F.2d 1109, 1122 (D.C.Cir. 1971).

20 In general, “an agency may decide to begin the environmental review process with the preparation
21 of an environmental assessment,” or EA, as defendants have done here. *Id.* § 7:11. DOE uses
22 environmental assessments to determine “whether to prepare an EIS or to issue a FONSI” (a Finding of
23 No Significant Impact). 10 C.F.R. § 1021.321(b). If the EA reveals that the proposed federal action has
24 the *potential* to significantly affect the quality of the human environment, an EIS is required. 42 U.S.C.
25 §4332; *Foundation for North American Wild Sheep*, 681 F.2d at 1178. Even if a project’s risks of
26 environmental harm are uncertain, if they are potentially significant, an EIS is required. *City of Davis v.*
27 *Coleman*, 521 F.2d 661, 676 (9th Cir. 1975). On the other hand, a proper finding by an agency that the
28 proposed action will produce *no* significant impact on the environment relieves the agency of its duty to

1 prepare an EIS. 40 C.F.R. §1501.4(e). An agency cannot, however, simply issue a conclusory statement
2 claiming the absence of significant impacts. Instead, the EA must “[b]riefly provide sufficient evidence
3 and analysis for” its determination. 40 C.F.R. § 1508.9(a)(1).

4 Although an EA need not be as thorough as an EIS, the agency must still conduct a
5 “comprehensive assessment of the expected effects of a proposed action” to determine if that action is
6 significant. *Foundation on Economic Trends v. Weinberger*, 610 F.Supp. 829, 837 (D.C.D.C. 1985),
7 quoting *Lower Alloways Creek Twp. v. Public Service Elec.*, 687 F.2d 732, 740 (3rd Cir. 1982). The
8 significance of the action’s environmental impact is based on various factors, such as “the degree to
9 which the proposed action affects public health or safety,” the “[u]nique characteristics of the geographic
10 area,” the “degree to which the effects on the quality of the human environment are likely to be highly
11 controversial,” the “degree to which the possible effects on the human environment are highly uncertain
12 or involve unique or unknown risks,” the “degree to which the action may establish a precedent for future
13 actions with significant effects,” and whether “the action is related to other actions with individually
14 insignificant but cumulatively significant impacts.” 40 C.F.R. §1508.27.

15 As demonstrated below, defendants’ actions in approving the project and the EA constitute
16 violations of the preceding NEPA requirements. As such, DOE’s approval should be overturned and the
17 project sent back to the agency for further environmental review and reconsideration in light of that
18 further analysis required by NEPA.

19 **A. The EA Fails to Acknowledge Potentially Significant Impacts**

20 NEPA requires agencies to take a “hard look” at the potential environmental consequences of
21 their actions. *Kern v. U.S. Bureau of Land Management*, 284 F.3d 1062, 1066 (9th Cir. 2002). Thus,
22 “mere[] . . . asserti[ons] that an activity . . . will have an insignificant effect” do not satisfy NEPA;
23 instead, agencies must “supply a *convincing statement of reasons* why potential effects are insignificant.”
24 *Alaska Center for Environment v. U.S. Forest Service*, 189 F.3d 851, 859 (9th Cir. 1999) (emphasis
25 added). For a plaintiff to successfully argue that an EIS should have been prepared, the plaintiff must
26 only “raise ‘*substantial questions* whether a project *may* have a significant effect’ on the environment.”
27 *Blue Mountains Biodiversity Proj. v. Blackwood*, 161 F.3d 1208, 1212 (9th Cir. 1998) (citation omitted;
28 emphasis added) (“*Blue Mountains*”). “[G]eneral statements about “possible” effects and “some risk” do

1 not constitute a “hard look” absent a justification regarding why more definitive information could not be
2 provided.” *Id.* at 1213, quoting *Neighbors of Cuddy Mountain v. U.S. Forest Service*, 137 F.3d 1372,
3 1380 (9th Cir. 1998). As demonstrated below, the EA here fails to affirmatively demonstrate that the
4 project’s impacts will be insignificant. Therefore, the EA does not comply with NEPA, and its approval
5 and defendants’ adoption of the FONSI for the project should be set aside.

6 **1. The EA Does Not Adequately Address the Project’s Radiation Impacts**

7 The project’s potential radiation emissions are hugely controversial because (1) the project will be
8 located near family residences and the Lawrence Hall of Science, a children’s museum, (2) the accelerator
9 has been described as “an experimental facility,” which will “require a laser at or beyond state-of-the-art,”
10 and (3) the facility will be located on an unstable slope in a highly active seismic zone. AR14:0337. The
11 EA largely ignores the safety concerns associated with these factors and therefore fails to “supply a
12 convincing statement of reasons why” the project’s “potential effects are insignificant.” *Alaska Center*,
13 189 F.3d at 859.

14 **a. Accidental Releases**

15 First, despite admitting that an accidental release of radioactive materials has occurred in the same
16 building in the *past* (AR7:0103; *see also* Administrative Record: Environmental Assessment Footnotes,
17 Tab 8, p. 1149 (“AR:EAFN:8:1149”)), the EA fails to adequately address the potential for *future*
18 accidental exposure of radiation from the proposed project to citizens located in the surrounding public
19 and residential areas. This critical fault in the EA was identified by *LBNL’s own NEPA Document*
20 *Manager*, Kim Abbott (AR7:0232), in a June 15, 2009 email wherein she *admitted* that “I talked to Gary
21 and we agreed that the EA does not do a very good job of accidental analysis.”³ AR19:0459. Ms. Abbott
22 continued: “The type so [*sic*] accidents typical at LBNL would be earthquake, wild land fire, and slides.”
23 *Id.* Plaintiff concurs with these admissions by LBNL’s own NEPA Document Manager that its analysis

24
25 ³ The “Gary” referred to is presumably Gary Hartman, the NEPA Compliance Officer for
26 the EA, who works at DOE’s Oak Ridge Office of Science Integrated Service Center and whose
27 name appears on multiple documents related to this project. *E.g.*, AR7:0068 and AR30:0666.
28 The addressee, Jeff Philliber, a fellow employee of LBNL, also concurred with Ms. Abbott’s
assessment that the EA did “not do a very good job” of analyzing accidental releases.
AR19:0459.

1 of accidental releases in its EA “does not do a very good job,” and that it fails to adequately address the
2 “type of accidents typical at LBNL.” *Id.* The EA therefore violates NEPA.

3 Even had LBNL not admitted the EA’s inadequacy, no other conclusion is possible. It is
4 undisputed that the EA itself contains *no* analysis of accidental releases of radiation. The “Hazards and
5 Human Health” section of the EA has *no* discussion of *accidental* radiation exposure. AR7:0101-107.
6 For example, the subsection discussing “Radiation from Laser Plasma Accelerator Operations and
7 Radiation Monitoring Systems” only addresses the extent of concrete shielding that will be constructed to
8 attempt to protect workers and citizens from exposure during *normal* operations – not accidental releases.
9 AR7:0103-105. It also discusses plans to install radiation monitors. *Id.* It fails, however, to address
10 what would happen if the shielding became compromised due to the “typical” accidental release scenarios
11 identified by Ms. Abbott such as “earthquake, wild land fire, and slides” (AR19:0459) during operation
12 of the accelerator. AR7:0103-105. Similarly, the “Fire and Explosion Risk” subsection only describes
13 the potential for the accelerator to *cause* a fire and the general safeguards that LBNL has taken to prepare
14 for wildfires, not the potential for accidental exposures that could result *from* a wildfire. None of the
15 other subsections of the EA attempts to remedy these omissions.

16 Perhaps most significantly, the EA sweeps under the rug the serious questions of earthquake safety
17 and slope instability, relegating them to the category of “Issues Determined not to Warrant Further
18 Discussion.” AR7:0099. After cursorily noting the highly hazardous seismic conditions surrounding the
19 project site, the EA inexplicably ignores the central issue of what would happen if an earthquake on the
20 “active Hayward Fault” or the “inactive Wildcat Fault” caused an accidental release of radiation.
21 AR7:0099. Instead, without any analysis of the threat, the EA sidesteps the issue with the conclusory
22 claim that the building meets “standards for safe occupancy and the conduct of operations” and that the
23 proposed project “would further enhance the structural system” of the building. *Id.* Yet the most obvious
24 concern about this facility is what will happen if an earthquake occurs while the accelerator is in
25 operation. Assurances that the building is “up to code” fail to address the public’s fundamental concern
26 about the project’s potential accidental release of radiation *during* a seismic event, since the project is
27 sited in a highly hazardous earthquake zone.

28 To add insult to injury, the EA’s description of the seismic conditions underlying the project site

1 seems to have been sanitized. The description in the EA mentions only the Hayward and the Wildcat
2 Faults. AR7:0099. When compared to the 2nd Administrative Draft of the EA, however, that description
3 appears to be misleading, if not downright false. The 2nd Administrative Draft describes the seismic
4 conditions as follows: “An active fault parallel to the Hayward Fault is thought to *intersect the southwest*
5 *corner of Building 71* [the project site], and *another at right angles is located at the northeast corner.*”
6 AR23:0572, emphasis added, citing 1996 LBNL Site Environmental Report. The comment
7 accompanying this information states that: “We only just came across this reference. Is there a better
8 discussion of this anywhere that shows this fault is minor or inactive? *This will raise concern.*”
9 AR23:0572-573, emphasis added. Thus, according to the 1996 Report and one of the initial drafts of the
10 EA, two active faults underlie the building in which this highly experimental laser accelerator that emits
11 powerful radiation will be located. *Id.* Yet despite the potential harm that could befall workers,
12 residents, and nearby school children, the preparers of the EA chose to strike out this highly relevant
13 information and thereafter simply ignore the earthquake hazard and its concomitant threat of accidental
14 radiation release – relegating such concerns to the category of issues that do not “[w]arrant [f]urther
15 [d]iscussion.” AR7:0099.

16 In a similar vein, the EA states that the “[a]ction area is of ‘medium risk’ for slope instability
17 occurring at some point in the future,” but then discounts any slope stability concerns without any
18 analysis. AR7:0100. In fact, as the Geotechnical Investigation for the project admits, “most of Building
19 71 is located within an official hazard zone for earthquake-induced landsliding.” AR2:0009. Even if this
20 designation translates into a “medium risk” of slope instability, such designation requires at least a
21 modicum of analysis of what would occur if the slope underlying the site suddenly became unstable and
22 compromised the accelerator in ways that could cause an accidental release of radiation. *Blue Mountains*,
23 161 F.3d at 1213 (“[G]eneral statements about “possible” effects and “some risk” do not constitute a
24 “hard look” absent a justification regarding why more definitive information could not be provided.’
25 [citation]”). Without providing such an analysis, the EA simply does not pass NEPA muster.

26 Ms. Abbott’s email attempts to provide DOE with one escape hatch. After admitting that the
27 accidental release analysis in the EA was inadequate, she states that “[w]e agreed at this point not to
28 revise the EA. If the public comments on the lack of accident analysis we can provide the analysis in the

1 response to the comment.” AR19:0459. NEPA requires, however, that all relevant information be
2 provided to the public in an properly formulated EA so that it may comment on the analysis undertaken
3 by the agency.⁴ Parking relevant information on the sidelines during public review and comment directly
4 undercuts NEPA’s public disclosure and information-solicitation mandates.

5 Additionally, even *if* DOE’s hide-the-ball tactic were legal, its responses to comments fail to
6 provide a satisfactory analysis of accidental releases. The only mention of such an event states as
7 follows:

8 The accelerator would produce radiation only during normal operation and would shut
9 down and stop producing radiation during a disruptive event (e.g. that cause ground
10 shaking or power disruption). During other potentially catastrophic events, like wildland
fires, bomb threats, etc., operations of BELLA would be halted, as would most research
activities at LBNL.

11 AR7:0246. This unsupported response to comment begs the question what would happen if the
12 accelerator continued to produce radiation after an event that caused a breach in containment? The whole
13 purpose of the requested evaluation is to demonstrate to an apprehensive citizenry that DOE has analyzed
14 such a scenario and has data and reasoning to back up its claim that there would be no accidental release
15 of radiation. But this essential analysis was not provided in the EA. Consequently, the record contains
16 no data and analysis demonstrating that the accelerator could be shut down in time to prevent an
17 accidental release in the event of a major earthquake, landslide or wildfire. *Id.* Similarly, the EA ignores
18 the potential that human error or miscommunication combined with a catastrophic event could lead to

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20 ⁴ *State of California v. Block*, 690 F.2d 753, 770 (9th Cir. 1982) (“NEPA’s public
21 comment procedures are at the heart of the NEPA review process”); *Citizens for Better Forestry*
22 *v. U.S. Dept. of Agriculture*, 341 F.3d 961, 970-71 (9th Cir. 2003) (One of NEPA’s fundamental
23 purposes is to “ensure that federal agencies are informed of environmental consequences before
24 making decisions and that the information is available to the public,” citing *Okanogan Highlands*
25 *Alliance v. Williams*, 236 F.3d 468, 473 (9th Cir. 2000)); *Ocean Mammal Institute v. Gates*, 546
26 F.Supp.2d 960, 972 (D.Hawai’i, 2008) (“Regardless of whether they prepare an EA or EIS,
27 federal agencies must ‘[m]ake diligent efforts to involve the public in preparing and
28 implementing their NEPA procedures,’ and ‘[s]olicit appropriate information from the public.’
40 C.F.R. § 1506.6(a),(d)”); *Sierra Club v. Babbitt*, 69 F.Supp.2d 1202, 1218 (E.D.Cal. 1999)
(EA provided “insufficient detail” to “allow the public a meaningful opportunity to comment on
the project during the planning stages” or for “Defendants to make an informed decision”).
Foundation for North American Wild Sheep, 681 F.2d at 1178 (9th Cir. 1982) (“The omission of
any meaningful consideration of . . . fundamental factors precludes the type of informed
decision-making mandated by NEPA”).

1 radiation releases. Instead, the response assumes without analysis that no release will ever take place, no
2 matter what type of accident occurs. Such unsupported wishful thinking is not sanctioned by NEPA
3 jurisprudence. *San Luis Obispo Mothers for Peace v. Nuclear Regulatory Comm'n*, 449 F.3d 1016,
4 1030-31 (9th Cir. 2006) (agency was unreasonable in categorically dismissing the possibility of a terrorist
5 attack as “too remote and highly speculative” to warrant NEPA consideration).

6 In sum, the EA fails to address the results of operation of the accelerator under abnormal or
7 catastrophic circumstances and thereby ignores all probability of an accidental release. These
8 potentialities, however, should have been addressed in the EA. Plaintiff asks that the Court direct DOE
9 to rectify this NEPA violation by withdrawing the EA and conducting a comprehensive accidental release
10 analysis prior to any re-approval of this highly experimental accelerator.

11 **b. Sabotage**

12 The EA’s attempt to comply with DOE guidance by addressing “[i]ntentional destructive acts such
13 as sabotage and terrorism from internal and external sources” likewise falls far short of analyzing this
14 category of impact. AR7:0124. The short section in the EA that addressed “intentional destructive acts”
15 provides a cursory review of LBNL’s current security protocols, including a discussion of the protection
16 of laser facilities “by a combination key and keypad access controller that only allows entry by personnel
17 with laser safety training.” *Id.* It goes on to explain that if the laser room is breached “without the
18 appropriate key inserted or the correct access code being entered, the laser system within the room is shut
19 down immediately.” *Id.* The discussion concludes that “the Proposed Action would present no change to
20 the potential for intentional destructive acts.” *Id.*

21 The EA’s analysis, however, only addresses half of the threat, *i.e.* attacks from *outsiders* trying to
22 get *in* to the laser accelerator. It does not address “sabotage” from “internal . . . sources.” AR7:0124.
23 DOE’s guidance and common sense both dictate that the EA must also evaluate the possibility that
24 *insiders* who have access to the proper keys and codes (or outsiders who obtain this information) will use
25 the facility for destructive purposes. The danger posed by such an occurrence is illustrated by the fact
26 that the project involves the installation of an extremely powerful laser “at or beyond state-of-the-art”
27 (AR14:0337) with a “peak power level” of 1 petawatt (1PW =10¹⁵W), which is just slightly below the
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1 estimated heat flux transported by the Gulf Stream⁵ or more than *1,200 times the entire electrical*
2 *generating capacity of the U.S.*⁶ What would be the consequences of such an occurrence? The EA does
3 not even ask the question, much less provide an answer, and therefore fails as an informational document.

4 **c. Radiation Hazard Reports Not Yet Conducted**

5 Instead of tackling the radiation impacts head on, the EA defers evaluation of potential exposure
6 to the public to the future preparation of a “Safety Analysis Document (SAD) and Acceleration Safety
7 Envelope (ASE).” AR7:0095. These two documents will, according to the EA, “ensure the facility’s safe
8 operation.” *Id.* Yet, as discussed above, NEPA requires such information to be included in the
9 environmental review process, not deferred to some later report that will not be subject to public notice or
10 review.⁷ The whole point of conducting environmental review for this project was to specifically address
11 the “exceptionally large amount of energy” and associated “radiation that must be shielded from other
12 users of the building.” AR26:0611; *see also*, AR0460-461 (EA required based on “the electron beam
13 energy”). In describing the SAD report, DOE states in its Response to Comments that the report will
14 identify the “Maximally Exposed Individual” and base the “exposure calculation” on “the largest event
15 that could occur once the accelerator is operational.” AR7:0245. This information is critical to
16 understanding the risks of installing the project in an area surrounded by neighborhoods and a children’s
17 museum and therefore should have been included in the EA, not deferred to some future report. DOE
18 must complete the Maximally Exposed Individual” calculations and related analysis prior to any
19 reconsideration of the project to “ensure that federal agencies are informed of environmental
20 consequences before making decisions and that the information is available to the public.” *Citizens for*
21 *Better Forestry*, 341 F.3d at 970-71, citation omitted.

23 ⁵ [http://en.wikipedia.org/wiki/Orders_of_magnitude_%28power%29#](http://en.wikipedia.org/wiki/Orders_of_magnitude_%28power%29#petawatt_.281015_watts.29)
24 [petawatt_.281015_watts.29](http://en.wikipedia.org/wiki/Orders_of_magnitude_%28power%29#petawatt_.281015_watts.29)

25 ⁶ <https://www.llnl.gov/str/Petawatt.html>

26 ⁷ *Alaska Center*, 189 F.3d at 859 (an EIS is required unless the EA “suppl[ies] a
27 *convincing statement of reasons* why [the] potential effects” of the proposed project “are
28 insignificant,” quoting *The Steamboaters v. FERC*, 759 F.2d 1382, 1393 (9th Cir. 1985)
(emphasis added)); *see also*, citations at footnote 4, *supra*.

1 “quantified,” or “documented.” AR7:0237; 0253. More explanation of the experimental nature of the
2 facility and the potential for increased radiation from its operations due to its experimental nature should
3 have been included in the EA.⁸

4 **e. Radionuclide Emissions**

5 The EA does not mention radionuclide emissions resulting from the project. AR7:0117-119. Yet
6 in email communications, it is apparent that the project is likely to result in such emissions. AR22:0544.
7 In response to an inquiry from the Environmental Protection Agency (“EPA”), an LBNL employee
8 admitted that the facility will “[p]robably” produce such emissions. *Id.* But then, echoing the hide-the-
9 ball strategy that DOE consistently used throughout the preparation of the EA, the NEPA Document
10 Manager ignored this impact, stating that “[i]f EPA submits this as a comment from their review of the
11 EA we can answer it in the reply to comments.” *Id.* NEPA does not, however, allow agencies to exclude
12 relevant information from their Draft EAs and then hope that no one thinks to raise such concerns on their
13 own in comments on the project. As the oft-quoted case of *Save Our Ten Acres v. Kreger* explains,

14 [t]he spirit of [NEPA] would die aborning if a facile, *ex parte* decision that the project was
15 minor or did not significantly affect the environment were too well shielded from impartial
16 review. Every such decision pretermits all consideration of that which Congress has
17 directed be considered ‘to the fullest extent possible.’ The primary decision to give or
18 bypass the consideration required by [NEPA] must be subject to inspection under a more
19 searching standard.

20 472 F.2d 463, 466 (5th Cir. 1973). Accordingly, a Draft EA must include all information on the project
21 that may significantly contribute to an understanding of its impacts; such information must not be
22 preemptively filtered out of the environmental review, leaving the public in the dark.

23 **f. Cumulative Impacts**

24 NEPA requires consideration of a project’s cumulative impacts on the environment. “Cumulative
25 impact is the impact on the environment which results from the incremental impact of the action when
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27 ⁸ In Response to Comment AM-3, DOE attempts to explain that the “uncommon” feature
28 of this project, the size and intensity of the laser, is not the “part of the system” that “generate[s]
radiation” or “mixed radioactive and chemical hazards.” AR7:0237. This statement lacks any
evidentiary support and therefore fails to adequately address the potential for increased radiation
due to the experimental nature of the project. 40 C.F.R. § 1508.9(a)(1) (an EA must “provide
sufficient evidence and analysis for determining whether to prepare an environmental impact
statement or a finding of no significant impact”).

1 added to other past, present, and reasonably foreseeable future actions. . . .” 40 C.F.R. § 1508.7. The
2 EA’s deficient consideration of the project’s incremental effects violated NEPA.

3 First, the EA fails to assess the cumulative radiation emissions of BELLA taken together with
4 LBNL’s other operations. The entirety of the EA’s analysis of cumulative radiation impacts is as follows:

5 Because of the protection provided by each cave, the impact of operating all the
6 accelerators at once would be indistinguishable from operating the accelerators separately.
7 It is anticipated that BELLA would contribute no measurable radiation at the LBNL
property boundaries, whether specifically or cumulatively with all other LBNL activities
. . . .

8 AR7:0132. There is no support for this conclusion, which can only be accurate if *all* of LBNL’s
9 accelerators emit *no* radiation. As discussed above, the EA failed to quantify BELLA’s radiation
10 emissions. It also failed to quantify LBNL’s other radioactive facilities’ radiation emissions. Thus, much
11 like Ka in Rudyard Kipling’s *The Jungle Book*, DOE asks the public to trust the agency’s statement that
12 no radiation will ever reach LBNL’s property boundaries without providing a shred of evidence to
13 support its dangerous invitation.

14 Additionally, the EA fails to address the cumulative radiological impacts of a catastrophic event
15 such as a large scale earthquake and landslide, which could result in a series of accidental releases of
16 radiation to neighborhoods that border LBNL. *Id.* The EA reveals that other sources of radiation exist in
17 the proximate vicinity of the project site (*id.*), but does not explain the cumulative severity of a release of
18 these combined radiation sources under such circumstances.

19 Because the EA fails to substantively assess the project’s cumulative impacts, there are
20 “substantial questions” whether the project’s cumulative impacts “‘*may* have a significant effect’ on the
21 environment,” and an EIS must be prepared. *Blue Mountains*, 161 F.3d at 1212.

22 **2. Hazardous Waste**

23 The EA fails to adequately explain how the agency will dispose of the radioactive, hazardous
24 materials that will be created during the demolition and decommissioning phases of the project. First, the
25 EA explains that the project site currently contains asbestos, lead, beryllium, poly-chlorinated biphenyls,
26 radioactive materials, Americium-241, Cesium-137, and Curium-244. AR7:0102-103. Demolition
27 activities will create 60 to 100 tons of “reinforced concrete, structural steel, mechanical and electrical
28 equipment, roofing, other building material, and soil.” AR7:0094. Approximately ten percent of this

1 debris, or approximately 6-10 tons, will consist of hazardous waste. *Id.* The EA simplistically states that
2 its disposal plan includes “one anticipated truck trip to a licensed hazardous waste disposal facility.” *Id.*
3 Other than its listing of various regulations, the EA does not explain how the hazardous waste will be
4 identified, separated from the other waste, and safely removed from the site. This information is essential
5 to explain to an understandably concerned public how it will be protected from exposure to these
6 hazardous waste materials both during demolition and subsequent removal and transport elsewhere,
7 notwithstanding wind, rain, traffic jams or labor strife. DOE’s severely truncated treatment of this vital
8 issue violates NEPA: “A ‘perfunctory description,’ or ‘mere listing of mitigation measures, without
9 supporting analytical data,’ is insufficient to support a finding of no significant impact.” *Nat’l Parks*, 241
10 F.3d at 734, quoting *Okanogan Highlands Alliance*, 236 F.3d at 473 (citations omitted). Further,

11 [i]n evaluating the sufficiency of mitigation measures, we consider whether they constitute
12 an adequate buffer against the negative impacts that may result from the authorized
13 activity. Specifically, we examine whether the mitigation measures will render such
14 impacts so minor as to not warrant an EIS.

15 *Id.*, citing *Greenpeace Action v. Franklin*, 14 F.3d 1324, 1332 (9th Cir.1992). Here, the EA provided no
16 analysis of whether or how its compliance with the regulations will “constitute an adequate buffer against
17 the negative impacts” of the project. *Id.*

18 **B. The EA Lacks Consideration of Offsite Alternatives**

19 Environmental assessments “shall include brief discussions of . . . alternatives as required by [42
20 U.S.C. § 433]2(2)(E).” 40 C.F.R. § 1508.9(b). NEPA section 102(2)(E) states that “all agencies of the
21 Federal Government shall . . . study, develop, and describe appropriate alternatives to recommended
22 courses of action” 42 U.S.C. § 4332(2)(E). As the Ninth Circuit recently observed,

23 Agencies are required to consider alternatives *in both EISs and EAs* and must give full and
24 meaningful consideration to all reasonable alternatives. *Native Ecosystems Council v. U.S.*
25 *Forest Serv.*, 428 F.3d 1233, 1245 (9th Cir. 2005); *see also* 40 C.F.R. § 1508.9(b). “The
26 existence of a viable but unexamined alternative renders an environmental impact
27 statement inadequate.” *Idaho Conservation League v. Mumma*, 956 F.2d 1508, 1519 (9th
28 Cir. 1992) (*quoting Citizens for a Better Henderson v. Hodel*, 768 F.2d 1051, 1057 (9th
Cir. 1985)).

29 *Te-Moak Tribe of Western Shoshone of Nevada v. U.S. Dept. of Interior*, 608 F.3d 592, 601 -602 (9th Cir.
2010) (emphasis added).

30 Contrary to this directive, the EA fails to adequately address off-site alternatives. First, the EA

1 completely fails to discuss the option of locating the facility at another DOE laboratory, such as one that
2 is not surrounded by residential neighborhoods or located on an unstable slope in a seismically active
3 area. AR7:0097. DOE lists 21 separate laboratories on its website, yet none was even mentioned in
4 considering alternative sites.⁹

5 Instead, the EA justifies its refusal to consider off-site alternatives on the grounds that “vacant
6 accelerator facilities in the area are uncommon, and a large perimeter around the building might have to
7 be leased and secured to provide an equivalent amount of protection from potential risk of radiation
8 exposure to the public.” AR7:0097. This statement, however, fails to explain why other project sites
9 were not considered. First, it is unclear that the project would be required to be located in a “vacant
10 accelerator facilit[y].” Given the amount of demolition, retrofitting, and new construction contemplated
11 in the project description (AR7:0082-085; 0092-94), many large, industrial buildings could easily serve as
12 an alternative location. Nothing in the EA indicates that the project would have to be located in an
13 abandoned accelerator facility or explains why Building 71 is a particularly more suitable project location
14 than any other offsite building.

15 Ominously, the EA relies on the need for a “large perimeter around the building” to protect the
16 public from radiation impacts. AR7:0097. Yet, quite remarkably, DOE says the *exact opposite* in its
17 Responses to Comments. It states that “[a] large perimeter is *not* required around Building 71 because
18 adequate protection is provided by the shielding from the cave and beam dump.” AR7:0245, emphasis
19 added. Thus DOE inadvertently nullified its own rationale for refusing to consider offsite locations and
20 exposed the truth behind the EA’s failure to consider offsite alternatives – that none were ever truly
21 considered.

22 **C. The EA Fails to Respond to Comments**

23 “NEPA’s public comment procedures are at the heart of the NEPA review process.” *State of*
24 *California v. Block, supra*, 690 F.2d at 770. “Agencies are . . . obligated to provide a meaningful
25 reference to all responsible opposing viewpoints concerning the agency’s proposed decision. . . .
26 Moreover, there must be good faith, reasoned analysis in response.” *Id.* at 773 (internal brackets and
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28 ⁹ <http://www.energy.gov/organization/labs-techcenters.htm>

1 citations omitted). Further, NEPA requires agencies to “acknowledge and respond to comments by
2 outside parties that raise significant scientific uncertainties and reasonably support that such uncertainties
3 exist.” *The Lands Council v. McNair*, 537 F.3d 981, 1001 (9th Cir. 2008). The EA here fails to
4 adequately respond to comments.

5 Most significantly, the EA does not provide “reasoned analysis in response” to multiple comments
6 addressing the public’s long-term exposure to the project’s radiation emissions. Specifically, the
7 comments referred to a report prepared by the National Academy of Sciences that concludes that “even
8 very low doses of radiation pose a risk of cancer or other health problems and there is no threshold below
9 which exposure can be viewed as harmless.” AR7:0189. The report thus undermines the EA’s implied
10 assumption that project radiation emissions, if below the regulatory limit, *cannot* be considered a
11 significant impact. DOE’s response to comments fails to address this critical point, relying entirely on
12 compliance with thresholds established by DOE regulations and orders. AR7:0237.

13 **D. The EA’s Project Description Is Inadequate**

14 To be sufficient, an EA must include “an adequate project description” *Sierra Club v.*
15 *Babbitt, supra*, 69 F.Supp.2d at 1218. Here, the project description is inadequate for two reasons. First,
16 the EA does not accurately describe the Project. After the EA’s publication, the project’s location was
17 changed, more extensive geotechnical work was planned, new rooms within Building 71 were added and
18 others resized. AR 1:0001-2. By failing to accurately describe the project, defendants violated NEPA.¹⁰
19 Second, the project description is inadequate because the EA does not include a floor plan of the project.
20 *See generally* AR7:0083-0095; *see also* AR 1:0002 (“the location of the . . . BELLA . . . is not
21 specifically described in the EA”). Because the EA does not include an adequate project description,
22 defendants violated NEPA.

23 **E. The EA Improperly Defers Formulation of Mitigation Measures**

25 ¹⁰ Alternatively, defendants violated NEPA by substantially modifying the project in ways
26 relevant to environmental concerns without preparing a supplemental Environmental
27 Assessment. *See* 40 C.F.R. § 1502.9(c) (detailing when supplemental EIS is required); *Idaho*
28 *Sporting Congress v. Thomas*, 137 F.3d 1146, 1152 (9th Cir. 1998) (same standard applies to
supplemental EA claims as supplemental EIS claims), *overruled on other grounds by The Lands*
Council, supra, 537 F.3d at 997.

1 In following NEPA, an agency “may not ‘act first and study later.’” *Western Land Exchange*
2 *Project v. United States Bureau of Land Mgmt.*, 315 F.Supp. 2d 1068, 1092 (D. Nev. 2004), quoting *Nat’l*
3 *Parks & Conserv. Ass’n v. Babbitt*, 241 F.3d 722, 734 (9th Cir. 2001). “A ‘perfunctory description,’ or
4 ‘mere listing of mitigation measures, without supporting analytical data,’ is insufficient to support a
5 finding of no significant impact.” *Nat’l Parks, supra*, 241 F.3d at 734, quoting *Okanogan Highlands*
6 *Alliance*, 236 F.3d at 473 (9th Cir. 2000) (citations omitted).

7 The EA relies on yet-to-be developed information to ensure that the project will not have
8 significant impacts. As explained above, the EA states that “prior to operations, LBNL will prepare, and
9 DOE will review and approve, a Safety Analysis Document (SAD) and Accelerator Safety Envelope
10 (ASE) . . . to ensure the facility’s safe operation.” AR7:0095. Thus the public is being asked to take
11 DOE’s word that it will conduct safety analyses and create adequate safety protocols related to the
12 operations of the facility prior to operation. NEPA, however, requires that such analysis and formulation
13 of mitigation measures take place prior to project approval and within the NEPA analysis. As stated
14 above, an agency “may not ‘act first and study later.’” *Western Land Exchange*, 315 F.Supp. 2d at 1092,
15 quoting *Nat’l Parks*, 241 F.3d at 734. Relying on documents that will be created months – if not years –
16 in the future to mitigate potential environmental impacts violates this requirement.

17 **F. The EA Improperly Incorporates Documents by Reference**

18 The EA’s use of incorporation by reference is unlawful for two reasons.

19 **1. NEPA Does Not Permit EAs to Incorporate Documents by Reference**

20 First, incorporation by reference may not properly be used in connection with an EA. “There is no
21 apparent reason to believe that an incorporation process is appropriate relative to an EA,” because,
22 “although the CEQ regulations permit . . . incorporation by reference in an EIS, 40 C.F.R. § 1502.21, no
23 such provision is made for an EA.” *Natural Resources Defense Council v. Duvall*, 777 F.Supp. 1533,
24 1538 (E.D. Cal. 1991); *accord, Sierra Club v. Babbitt, supra*, 69 F.Supp.2d at 1218. Incorporation is
25 impermissible because

26 the threshold for requiring an EIS is quite low. Thus only in those obvious circumstances
27 where no effect on the environment is possible, will an EA be sufficient for the
28 environmental review required under NEPA. Under such circumstances, the conclusion
reached must be close to self-evident and would not require an extended document
incorporating other studies.

1 *Id.* Incorporation by reference simply cannot be lawfully used in connection with an EA.

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1 **2. This EA Does Not Even Meet the Incorporation Requirements Applicable to EISs**

2 Second, even assuming for the sake of argument that the EIS incorporation requirements also
3 applied to EAs, “the standards applicable to . . . incorporation . . . are relatively rigid.” *Id.* at 1539.
4 Such incorporation is permissible only if three standards are met: (1) the incorporated material must be
5 “reasonably available,” (2) the EA or EIS must be “understandable without undue cross reference,” and
6 (3) the incorporation must “meet a general standard of reasonableness.” *Id.* The incorporation used in
7 defendants’ EA fails to meet these requirements.

8 Defendants’ EA is replete with excessive incorporations by reference that substantially hinder
9 public access to essential information about the project and its effects. The EA cannot be understood
10 without “undue cross reference,” and its voluminous incorporations do not “meet a general standard of
11 reasonableness.” *Id.* For example, the reader cannot locate a map of the project’s radiation monitoring
12 system, or ascertain the fire safety procedures that will be used by the project, without consulting a series
13 of two-to-three volume reports. *E.g.*, AR7:0104 n. 9, 0105-06 n. 12, 0131 n. 27. Additional
14 incorporations that require “undue cross reference” and fail to “meet a general standard of
15 reasonableness” include, but are not limited to: (1) *three different* Long Range Development Plans and
16 associated Environmental Impact Reports, relied upon for fire safety measures, past greenhouse gas
17 emissions, future sewer capacity, construction air quality emissions, and noise impacts (AR7:0106, 0109
18 n. 15, 0112, 0118, 0120); (2) a truck traffic engineering analysis intended to demonstrate the project’s
19 lack of traffic and air quality impacts (AR7:0088 n. 4; 0122 n. 22; 0061 n. 31); and (3) a report of the
20 historical qualities of building 71, used to determine the project’s cultural impacts (AR7:0123-24).

21 Defendants also acted unlawfully by incorporating by reference various internal documents which
22 are not “reasonably available” to the public. These documents include, but are not limited to: (1)
23 Publication 3000, LBNL’s Health and Safety Manual, whose procedures are intended to ensure the safety
24 and health of both workers and the public (AR7:0101; 0102, 0105, 0106, 0122); (2) DOE Order 5400.5,
25 whose procedures are relied upon to putatively demonstrate that the project will emit a safe level of
26 radiation to the exposed public (AR7:0131); and (3) LBNL Standard Specification Section 017419,
27 intended to demonstrate that the project will dispose of its solid waste without environmental impact
28 (AR7:0110).

1 Overall, the EA incorporates *over one thousand pages of documents into its footnotes alone*. See
2 AR:EAFN:1:1082 to 32:2105. Such an unreasonable amount of incorporation highlights the fact that an
3 EIS is necessary. Because the EA’s attempted incorporation by reference is unlawful, this Court must not
4 rely on information contained in the improperly incorporated documents to determine the legal adequacy
5 of the EA and must overturn DOE’s approval of the project due to the EA’s inadequacies.

6 IV. CONCLUSION

7 NEPA requires agencies to take a “hard look” at the potential environmental consequences of their
8 actions. If a proposed federal action has the *potential* to significantly effect the quality of the human
9 environment, an EIS is required. “The spirit of [NEPA] would die aborning if a facile, ex parte decision
10 that the project was minor or did not significantly effect the environment were too well shielded from
11 impartial review. Every such decision pretermits all consideration of that which Congress has directed be
12 considered ‘to the fullest extent possible.’ The primary decision to give or bypass the consideration
13 required by [NEPA] must be subject to inspection under a more searching standard.” *Save Our Ten Acres*
14 *v. Kreger, supra*, 472 F.2d at 466.

15 DOE’s decision not to prepare an EIS on its proposed Berkeley Lab Laser Accelerator fails this
16 test. The BELLA project clearly has the potential to significantly affect the environment. Contrary to
17 NEPA, the EA on which DOE bases its decision not to prepare an EIS fails to take the requisite “hard
18 look” at the project’s environmental risks. It sweeps under the rug the project’s potential radiation from
19 accidental exposure due to earthquakes, landslides and wildfire in an area with a notably high risk of all
20 three. It ignores the potential for accidental release of radiation due to sabotage by terrorists or
21 disgruntled employees. It impermissibly defers to vague future reviews essential evaluation of the
22 public’s potential radiation exposure. Even DOE’s own managers admitted, privately, that “the EA does
23 not do a very good job” analyzing radiation-related impacts.

24 The EA also ignores or downplays the project’s cumulative impacts taken together with LBNL’s
25 other hazardous operations, and fails to give any serious consideration to offsite alternatives in areas not
26 subject to severe risks of earthquakes, wildfire and landslides. The EA fails to adequately respond to
27 public comments raising the foregoing issues, improperly deferring formulation of mitigation measures,
28 and impermissibly incorporating thousands of pages of essential materials by reference.

