

Attachment 21A

Explanatory Note for National Aeronautics & Space Administration (NASA) Report February 1, 2010

As of December 31, 2009, NASA is reporting a total of 14 American Recovery and Reinvestment Act (ARRA) funded projects/activities. This is the same number reported on the September 30, 2009 report. NASA is reporting 72 NEPA actions, including 60 Categorical Exclusions (CE), 11 Environmental Assessment (EA), and one Environmental Impact Statement (EIS). This is a reduction of 2 NEPA actions since the previous report. Discussions of changes in the NEPA actions are provided below.

These activities are in support of all four NASA programs funded under the ARRA (Science, Cross Agency Support, Exploration, and Aeronautics). The four NASA programs are included on Page 1, rows 1-4 of the NASA spreadsheet. NASA has obligated a total of \$586,288,054 or approximately 59% of the ARRA funds it has received. Funds have been obligated in all four ARRA Program Areas.

NASA has not identified any projects where NEPA is not applicable and no projects/activities have been withdrawn. Thirty-one actions were reported as pending on the September 30, 2009 report. Of these, ten have been carried over as pending from the previous report. The status of those projects and other notable updates are discussed below.

Updates Since the Last Report:

Cross Agency Support – Hurricane Repairs (Row 1 on Page 2 of 12/31/2009 Report)

One additional CE was added to this report (12-31-2009 report, row 1) under Cross Agency Support. This brings the total CE actions for Cross Agency Support to ten.

Aeronautics – Aviation Safety Program (Rows 4-6 on Page 2 of 12/31/2009 Report)

Rows 6-7 in NASA's September 30, 2009 1609 Report showed three CEs (one done and two pending). It was determined by NASA that one of the pending CE's was in fact covered under an existing EA and it is now being reported as a completed EA (12-31-2009 report, row 6). The remaining pending CE (12-31-2009 report, row 5) is underway. NASA is currently gathering additional information to ensure the action does in fact fall under a CE. Once the information has been received and confirmed, the NEPA action will be finalized. This should be within a few months.

Aeronautics – Fundamental Aeronautics Program (Rows 7-8 on Page 2 of 12/31/2009 Report)

Rows 8-9 on NASA's September 30, 2009 1609 Report showed 9 CE's (1 done and 8 pending). NASA is now reporting 3 CEs done (12-31-2009 report, row 7) and 5 CEs pending (12-31-2009 report, row 8). The documentation for 3 of the pending CEs was completed on January 4, 2010

and will be reported as complete on NASA's next report. Documentation for the remaining two CEs is currently being prepared and should be finalized in the near future. The 12-31-2009 report has a reduction of one CE from the 9-3-2009 report as activities from 2 previously pending CE's were analyzed as one CE. This CE is being reported as complete.

Exploration – Commercial Crew and Cargo Program (C3PO) (Rows 9-11 on Page 2 of 12/31/2009 Report)

One pending CE (12-31-2009 report, row 10) is being carried over from the September 30, 2009 report. The environmental analysis documentation for this action has been initiated and should be completed within the next few months.

Science – Earth Science Research (Rows 17-19 on Page 2 of 12/31/2009 Report)

Rows 18-20 of NASA's September 30, 2009 report showed 16 CEs (5 done and 11 pending) and one EA done. NASA is now reporting one EA done (12-31-2009, row 19), 12 CEs done (12-31-2009 report, row 17); and 3 CEs pending (12-31-2009 report, row 18). The three pending CEs are underway and should be completed in the next couple of months. The 12-31-2010 report has a reduction of one CE from the 9-3-2009 report as activities from 2 previously pending CE's were analyzed as one CE. This CE is being reported as complete.

Science – Earth Systematic Missions (Rows 23-24 on Page 2 of 12/31/2009 Report)

Rows 26-29 of NASA's September 30, 2009 1609 Report showed 3 CEs (2 done and 1 pending) and four EAs (3 done and 1 pending). NASA is now reporting 4 CEs done (12-31-2009 report, rows 23) and no CEs pending. The three complete EAs on the 9/30/2009 report (rows 28) were in actuality 2 EA's (the same EA was reported twice). This has been corrected on the 12-31-2009 report (rows 24). The activities associated with the pending EA on the 9-30-2009 report (rows 29) have since been determined to be outside the scope of that EA. The proposed activities have since been identified as a development study and separate preliminary design study. Since the development study is separate from the preliminary design study, two CE determinations were completed in December 2009 (12-31-2009 report, row 23).

NASA's attached excel spreadsheet was completed using the following internal NASA explanations and guidelines:

1. Total Obligation is defined as "a binding agreement that will result in outlays, immediately or in the future. Budgetary resources must be available before obligations can be incurred legally. This term includes obligations as well as recoveries of the current and prior year obligations. Recoveries of prior year obligations are reported as budgetary resources in budget execution reporting rather than as obligations" (per the OMB Updated Implementing Guidance for the ARRA of 2009, dated April 3, 2009).
2. Categorical Exclusions (CE) are reported under the same Title/Program and Project/Activity if they are similar in nature. For example, CEs for roof replacements and building repairs at Johnson Space Center due to Hurricane Ike in 2008 are reported under a single Project/Activity entitled "Hurricane Repairs at JSC," and include ten individual

facility repair projects and activities. This same methodology will be used for Environmental Assessments (EAs) and Environmental Impact Statements (EISs). In the case where several CE's are grouped together under the same Project/Activity, the "Date NEPA is Done" will reflect the date the most recent CE was completed.

3. Date of Completion for CEs fall into one of three categories: (1) the date a NASA Record of Environmental Consideration (REC) was signed; (2) The date an environmental checklist was completed for an action not requiring a REC; or (3) the date either the NASA HQ NEPA Program Manager or Center NEPA Manager determined that the project/activity fell under a CE and no REC was required.
4. NASA still has 14 ARRA-funded projects. Project/Activities may have multiple NEPA actions indicated on the report because multiple tasks are occurring under the same ARRA project/activity. NASA has an Agency work breakdown structure for ARRA funded activities, which defines each project. A project is generally highly complex, and has many activities occurring at multiple NASA sites that contribute to its completion. A project often constitutes a single mission into space which is comprised of multiple subsystems, and consists of multiple tests and development activities. A project may contribute to a single research objective, and hence have multiple experiments and activities associated with it. Activities may occur at more than one NASA Center and each Center may prepare its own environmental review documentation in support of the project/activity. As a result, a "project" as defined for Recovery Act budgeting/accounting purposes does not always align with the "project" as defined for NEPA purposes on a one-to-one basis.
5. There is a considerable difference between the number of NEPA actions and the number of Recovery-Act funded projects in this report. Most ARRA-funded projects in this report consist of several individual tasks or activities, each with its own discrete NEPA action. The ARRA-funded project identifies either:
 - a. A broad project with several interdependent tasks which would involve one programmatic NEPA analysis, followed by subsequent tiered actions or site specific analyses; or
 - b. Multiple component "projects" that have independent utility and are individually analyzed under NEPA.
6. NASA has determined that for clarity and consistency purposes, with other reporting, funds allocation, and the management structure for the ARRA-funded projects/activities, there is only one ARRA project/activity for the Cross Agency Support Program on Page 1 of the report (in the "Number of ARRA Funded Projects/Activities" column). Ten CE actions are still indicated on Page 2 of the report. This reporting method is applied to all the projects/activities within NASA's ARRA Programs.

NEPA Benefits:

Environmentally sound decisionmaking is an important part of the NASA value system and plays a fundamental role in NASA's Program and Project planning. NASA's NEPA program

ensures that the agency is proactive in meeting its Federal stewardship responsibilities while ensuring mission success and lowering environmental liability. For example, within our Recovery Act Cross Agency Support (CAS) Program, a reduction in energy, operations, and maintenance costs was identified as one of four overarching success criteria for the program. In addition, sustainability practices were incorporated into the CAS projects as requirements. These requirements include; the use of recycled materials, recycling of materials removed during construction and remodeling, and a reduction in energy use.

Johnson Space Center (JSC) is expected to gain between 20 to 30% in energy efficiency on each building where Recovery Act funded roof repairs are being undertaken. In addition, energy efficient windows are currently being installed in the JSC Administration building. (spreadsheet page 2, row 1)

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